THE NATION'S SCHOOLS



JUNE 1954

Interviews with beginning teachers • Answering criticism with facts • Salary schedules for administrators • Programs for gifted and retarded • Space allocations for elementary schools • Laboratory for school planning institute • Four rôles of business officer

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION



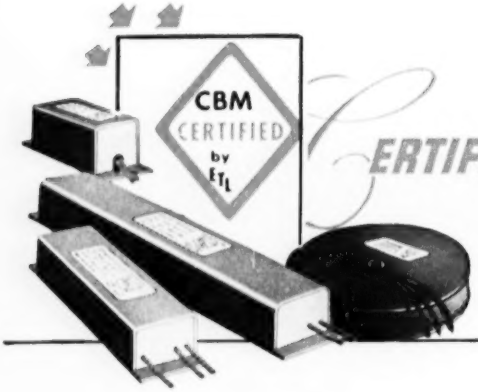
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Published monthly and Copyright 1954 by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago 11, Ill., U.S.A. Raymond P. Sloan, president; Stanley R. Clague, vice president and secretary; Everett W. Jones, vice president; Peter Ball, vice president; John P. McDermott, treasurer. Yearly subscription, United States and Canada, $3; foreign, $4. Current copies, 50c each. Member, Audit Bureau of Circulations; Educational Press Association of America. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Published on the 20th of the month preceding the date of issue. Allow 30 days in advance of publication date for change of address.

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AMONG THE AUTHORS


R. A. Siggelkow

Tips for superintendents hunting the elusive new teacher are offered (*p.* 43) by RICHARD A. SIGGELKOW, associate director of the University of Wisconsin Teacher Placement Bureau and a member of the school of education faculty. He received his Ph.D. from the university in 1953; his dissertation centered on the content of interviews between superintendents and senior education students. After his release from the armed services in 1945, Dr. Siggelkow taught history and social studies in two Wisconsin towns, Mayville and Columbus. He joined the placement bureau staff in 1949. This year he is chairman of Wisconsin's state teacher placement association group.


Morris H. Winward

School districts should have salary schedules for administrators as well as for teachers, believes MORRIS H. WINWARD (*p.* 52). Dr. Winward has been director of adult education for the Santa Monica City College since January. Previously he was an elementary school principal in Junction, Utah, an education adviser in Nevada, a teacher and later an elementary principal in Santa Monica, and assistant superintendent of schools for San Diego County, California (a temporary 12 month appointment).

WILLIAM H. KING is a jack-of-all-trades and the master of several, including educational television (*p.* 88). Mr. King has been a teacher at Aura and Pitman, teaching principal at Sewell, and teacher and then audio-visual director at Plainfield, all in New Jersey. Since 1950 he has been audio-visual coordinator for the New Jersey State Department of Education. During summer vacations he has worked as a typist, an expediter, and an electrician and in a cleaning and pressing establishment. Recently he has spent his summers teaching at various universities. Two of his hobbies—electronics and photography—tie right in with his present position.

A civic-minded woman, A. HELEN ANDERSON (*p.* 47) has contributed her talents to many organizations—the Y.W.C.A., Red Cross, Community Chest, Denver City Planning Commission, Denver Woman's Press Club, Rocky Mountain Radio Council. She was the first president of the National School Public Relations Association, from 1935 to 1937. Miss Anderson has been associated with the Denver public schools since 1919, as a teacher at South High School, supervisor of publications, and, since 1947, director of publications.

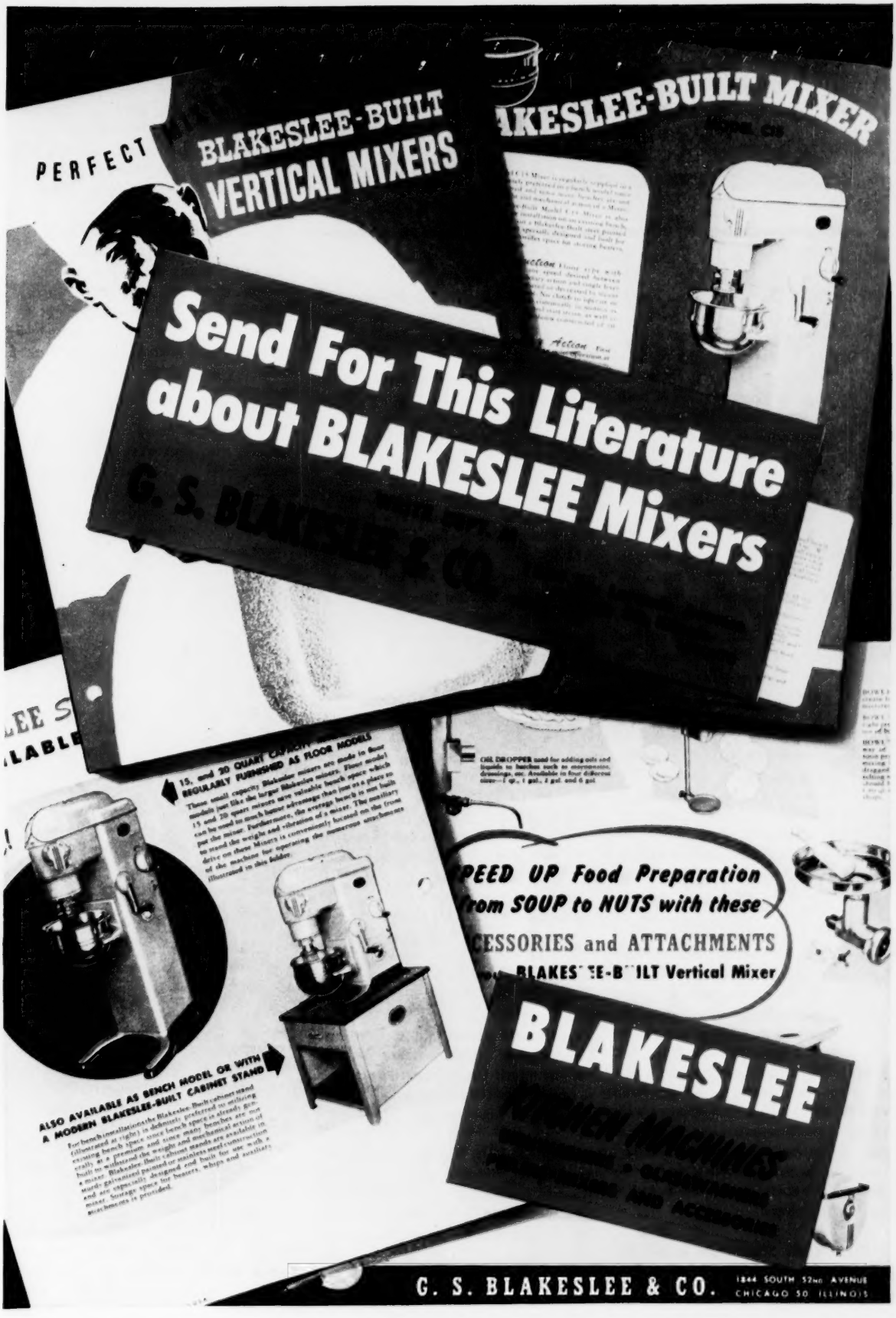
Although ENNIS NARDI is an accountant, he offers much more than figures in his account of a high school dormitory in California (*p.* 78). Mr. Nardi has held his present position as an accountant with the bureau of school apportionments and reports, division of public school administration, California State Department of Education, since 1951. As his hobbies he lists cooking, writing and the study of church history.

Are our elementary schools too large? Yes, says (*p.* 56) ROBERT WILLIAM MACVITTIE, professor of elementary school administration and principal of the Campus School at the State University of New York College for Teachers, Buffalo. Dr. MacVittie has spent most of his working hours during the last 10 years in elementary schools. He was a teacher in the central school at Pine Plains, N.Y., and in the Memorial School at Middletown, N.Y., and principal of the Montowese and Ridge Road schools in North Haven, Conn., before going to Buffalo in 1953.


James F. Redmond

When JAMES F. REDMOND (*p.* 82) took office as superintendent of schools for New Orleans June 1, 1953, his first official act was to have the door to his office removed. In this way he wished to assure staff members and citizens that he will always be available to discuss school problems. Dr. Redmond formerly was a teacher in the schools of Kansas City, Mo., and served as assistant to Herold C. Hunt when the latter was superintendent in Kansas City and again when he was superintendent in Chicago. Early in 1952 Dr. Redmond was appointed purchasing agent for Chicago's public schools. His next professional step was to the position of superintendent of schools in New Orleans.

An effective way of acquainting the public with the schools is described on page 63 by EUGENE S. THOMAS, principal of Central High School, Kalamazoo, Mich. Mr. Thomas was formerly a football and basketball coach. Before that, while he was a student at Indiana University, he earned major letters in football, basketball, track and baseball, winning a total of 10 major awards. In 1953 Mr. Thomas was awarded an honorary degree of master of education by Western Michigan College of Education. He is a former president of the Michigan Secondary School Association.


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MEGASCOPE



a brief, analytical look at several features in this issue by CALVIN GRIEDER, professor of school administration, University of Colorado

It's a Dilly. As the teacher shortage continues to worsen, administrators find that procurement is an increasingly onerous responsibility. More time and effort than ever before must be expended per appointee, much of both devoted to interviews. The conscientious administrator is loath to recommend teachers, especially beginners, without an interview. In view of these facts, the weaknesses of typical interviews reported by Richard A. Siggelkow (*p.* 43) are to be deplored. Further research should prove to be most worth while. The proposal for a file of "community credentials" is a dilly.

Responsive to Change. It would be hard to find a better application of the principles of public school relations than the report on Denver submitted by A. Helen Anderson (*p.* 47). Noteworthy, too, is the responsiveness of public opinion to changes in the schools. The manner in which the administration anticipated problems of interpretation looks as if it were endowed with vaticinal powers. A better explanation: dedicated and intelligent devotion to the job, combined with imagination and hard work.

Let's Study School Size. Robert MacVittie's plea (*p.* 56) for research on how pupils are affected by size of school will, I hope, reach receptive minds. Most of us have an uncomfortable feeling that large schools are not desirable, but we have little evidence. The matter is still in the realm of opinion and ought to be subjected to scientific analysis. Large cities with heavy concentrations of population may never be able to cope satisfactorily with this problem, but it is doubtful if every possibility has thus far been explored.

Defines the Separation Line. Constant vigilance is required to maintain the separation of church and state in public education. Defining the line of separation is becoming more vexatious as education and other governmental and social relations grow increasingly complex. Lee O. Garber's discussion (*p.* 61) of a recent Missouri case is encouraging to those of us who want to hold fast to the principle of separation.

Another Commendable Kalamazoo Case. A change has been rung by Kalamazoo on the familiar "Go-to-School" days. Frequently such events are characterized by a good deal of waste motion and lost time. As Eugene S. Thomas shows (*p.* 63), carefully planned visits by small groups throughout the year can be a productive experience for both the schools and their visitors. Incidentally, such a scheme is eminently adapted to overcoming the lack of adult observation of teachers at work. I believe that most teachers would appreciate and benefit from more adult observation.

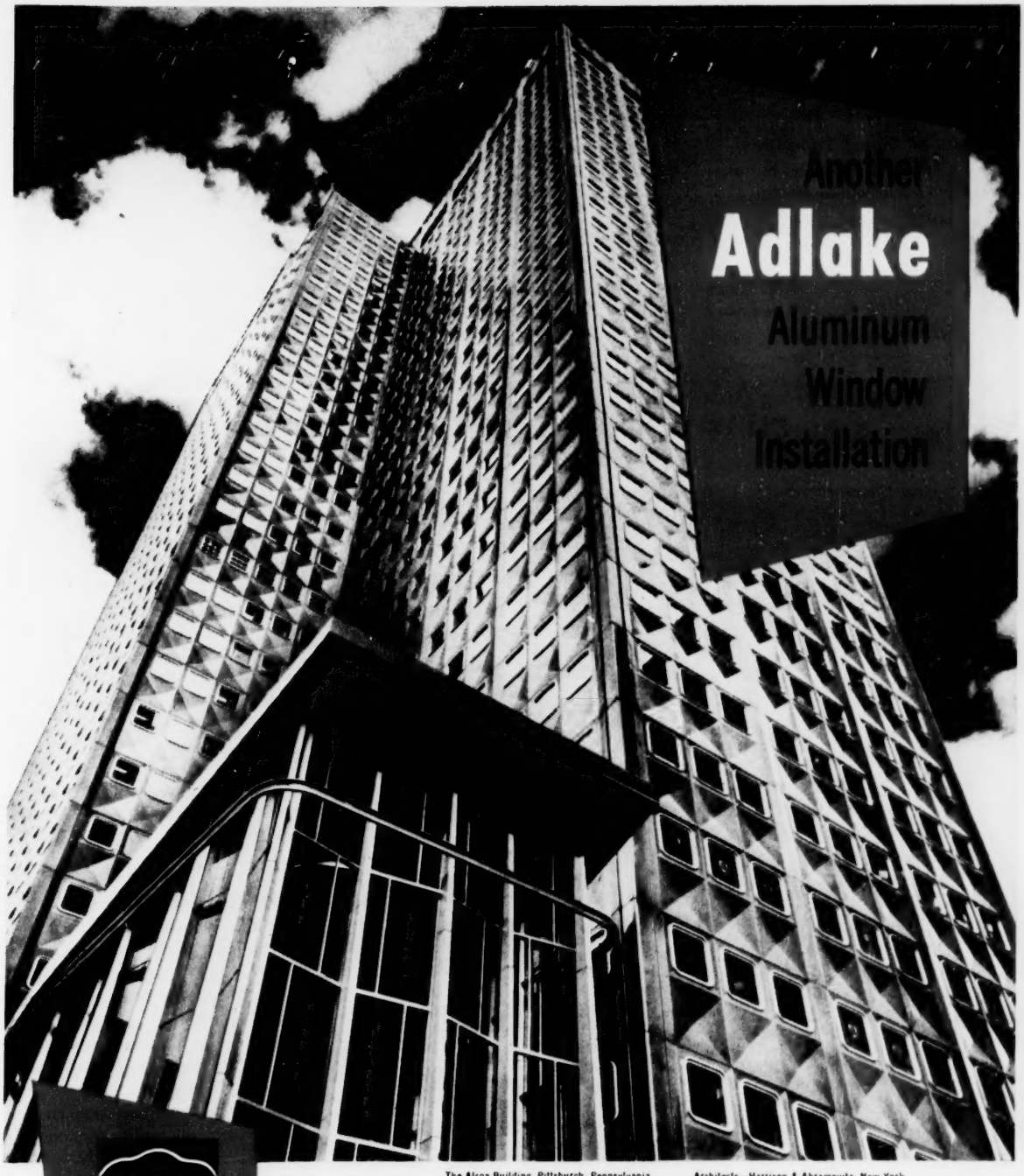
Moderate Costs; Large Returns. The two-pronged problem dealt with by Julius E. Warren and James M. Dunlap, educating the gifted and the educationally retarded (*p.* 50), has scared off many administrators and school boards. It looks like a very expensive proposition from every angle. The results of the program at University City, Mo., apparently attest to the soundness of its conception. Here is a plan that is quite moderate in cost, yet one which yields large returns. And it can be adapted to any school system of small or medium size.

Applicable to Groups. When you read the recommendations for administrators' salaries made by Morris H. Winward (*p.* 52), remember that they are suggested for districts with *pupil* populations of 30,000 or more. His Group I, for instance, includes districts of roughly 150,000 to 500,000 *total* population. If you remember this, I wager you'll agree with me that his ratios of administrators' salaries to teachers' salaries are far too low. What ratios would he use for districts with pupil populations of less than 30,000? Placing *one* administrative position, that of the superintendent, on a schedule isn't such a hot idea either. The schedule idea is applicable to groups.

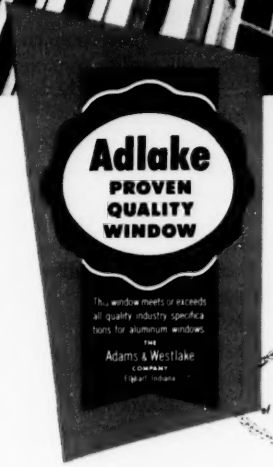
Circumstances Justify Dormitories. In sparsely populated areas, with which Ennis Nardi is concerned (*p.* 78), there is a different problem from MacVittie's, that of developing schools large enough to achieve good educational and financial results. Here school dormitories at the high school level may be preferable to daily transportation. Nardi's story from California will interest many administrators, especially in the west central and western states. I was particularly pleased because a few years ago I was figuratively flayed, drawn and quartered for proposing dormitories for sparsely settled areas of Colorado.

Even More Important. In the first paragraph of his article (*p.* 82) James F. Redmond takes too modest a view of the importance of school business administration. At least it seems to me that it's *more* important than private business. The schools are supported by compulsory taxation, which puts them in a position quite different from that of business. And they are set up as agencies of society for both social and individual welfare. Mr. Redmond's conception of the rôles filled by the school business officer is, however, statesmanlike and quite sound, giving preeminence to the educational program.

Excellent Guide. In the long run, a state school construction program of the type adopted in Washington will yield advantages greater than those which local districts alone can achieve. Testimony to this effect is evident in the study of elementary schools referred to by Harold Silverthorn (*p.* 66). The recommended space allocations are an excellent guide for architects and school officials. One of the most admirable aspects of the Washington program is the use of the recommended space allowances as a measure for calculating state building aid, not as a hard and fast set of controls imposed on the districts. The impetus for better planning is a notable result.



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Questions and Answers

Functions of School Treasurer

What functions typically are performed by a school treasurer?

From information available from 42 states it is clear that the predominant practice is to limit the job of the treasurer of school funds to custody. There are eight types of positions indicated in those returns.

It is interesting to note that two states, Florida and Texas, use the depository system. Advocates of this system claim advantages of simplicity and economy over treasurer systems. The board selects the depository and upon proper bonding arrangements gives it authority to act as custodian of funds. The depository assigns to one of its fiducial officers the responsibility for overseeing the school district's accounts and reporting to the board of education.

The actual accounting is done through the regular system, along with accounts of other customers. This function is performed by a depository anyway with or without a treasurer. Moreover, the depository must be properly bonded, even with a treasurer. No treasurer's bond is any good unless the depository with which he deals is properly insured.

The treasurer, himself bonded, coordinates, oversees and assures accuracy. The depository releases funds upon his authorization which he in turn received from the board, usually in the form of warrants, commonly called checks. The certification of the treasurer adds another testimony to the honest handling of funds. But, since he has only limited authority, there must be other checks and balances.

The board itself exercises general supervision. Its controlling instrument is the budget. Every transaction revolving around this document requires a duly signed instrument—minutes of the board, purchase orders, requisitions, delivery receipts, contracts and others. All of these transactions provide opportunity for witnessing, safety, cross-checking for errors, and auditing.—WILLIAM P. MCLURE, *director, bureau of educational research, University of Illinois.*

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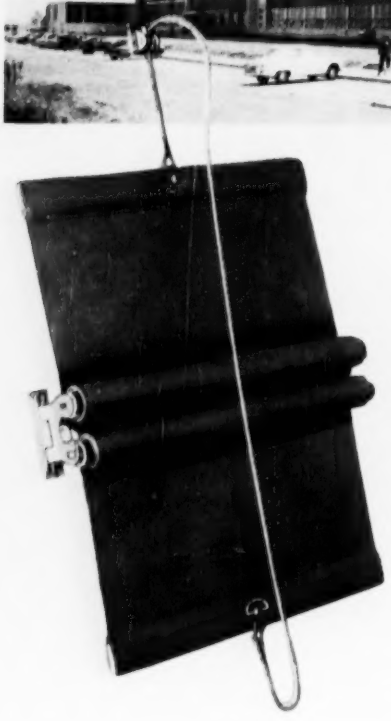
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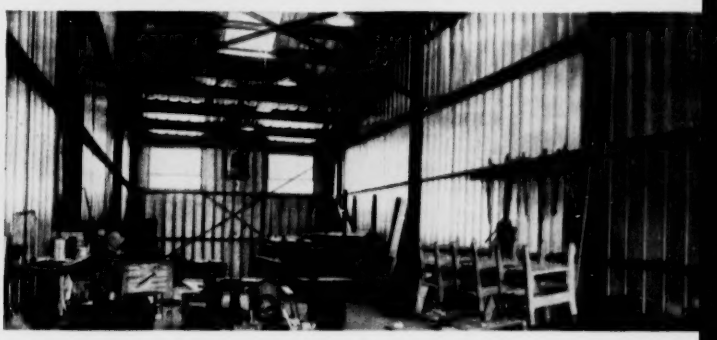
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H. M. Kallen — *New School for Social Research*
James D. MacConnell — *Stanford University*
Chester F. Miller — *Saginaw Public Schools*
James F. Redmond — *New Orleans Public Schools*
Paul A. Rehmus — *Portland Public Schools*
W. C. Reusser — *University of Wyoming*
R. E. Scott — *Hennepin County Schools*
Herman L. Shibler — *Indianapolis Public Schools*
F. R. Sifert — *Maywood Public Schools*
Lindley J. Stiles — *University of Virginia*
W. W. Theisen — *Milwaukee Public Schools*
Edmund H. Thorne — *West Hartford Schools*
Julius E. Warren — *University City Public Schools*
Paul D. West — *Fulton County Schools*
W. T. White — *Dallas Public Schools*
H. I. Willett — *Richmond Public Schools*
Benjamin C. Willis — *Chicago Public Schools*

ous feeding of water in contact with plastic.

By the end of 1953 no proof of any public health hazard had been found to result from the use of these plastic pipes for potable water systems.

This project will continue on into 1954, when a final report will be released by the foundation.—*Taken from the 1953 annual report of the National Sanitation Foundation.*

READER OPINION

No Differentiated Salary Schedule for Teachers

Sirs:

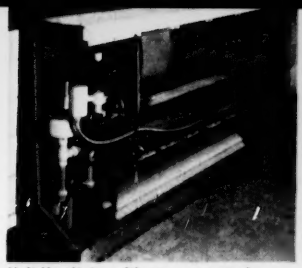
Regarding your opinion poll this month (May 1954), I would like to say that as a matter of principle I can see no justification for a differentiated salary schedule as between men and women. It seems to me that our profession, if it is a profession, has no room in it for different rates of pay which are based upon sex or dependency considerations or any other extraneous matter.

I would much rather see the professional status of all teachers grow to the point where both men and women can earn adequate compensation. In my opinion this can only be done if teachers become truly professional and if their work with children becomes recognized as indispensable. I feel that all teachers have an obligation to improve themselves professionally to render an ever increasing quality of service in our public schools. If this is the primary goal compensation should take care of itself.

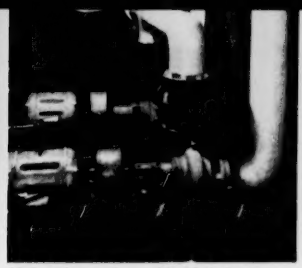
There will be many evidences, as there are now, of underpaid teachers, both men and women. I don't see how we can improve this difficulty by adopting the trade union tactics.

It seems to me that teachers must either become professional in every respect of the word or become simply workers for a wage. None of this in any way minimizes the poor economic status in which teachers finally find themselves. I am merely attempting to point out that the way to adequate compensation is not through allowances, bonuses and special favors to special groups but rather through continued improvement of the professional services which we render.—Douglas A. Chandler, *superintendent of schools, Hamilton, Mass.*

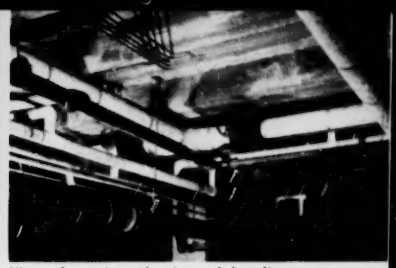




Unit Ventilator with cover removed. Hot water heat permits use of ½" control valve which results in lower cost and closer control.



Hot water system with high temperature drop requires smaller circulating pumps. Result — reduced installation and operating costs.



View of supply and return piping (large covered lines). High temperature drop system requires smaller piping and less building space — another important savings in initial cost.

In "HOT WATER" for years!



Light, bright and comfortable! A typical classroom in the Riverside-Harrison Elementary School, Cincinnati, Ohio, equipped with a Herman Nelson Unit Ventilator. Architect and Engineer: James E. Allan; Mechanical Contractor: Henry Niemes Co.

If your Choice is Hot Water—

Herman Nelson Leadership in Unit Ventilator Design for Hot Water Heating has been proved by Years of Service in scores of Schools

Cincinnatians have every right to be proud of their Riverside-Harrison Elementary School. Completed in 1951, this modern structure contains 17 classrooms, gymnasium, auditorium and cafeteria. Evidences of careful planning are apparent with the adoption of such cost-cutting and comfort features as forced hot-water heat and Herman Nelson Unit Ventilators.

For the past several years, Herman Nelson Unit Ventilators and high temperature hot water have worked as a "team". It all came about with the development by Herman Nelson engineers of the first practical, high efficiency hot water heating element for unit ventilators. The heating element—a 4-pass serpentine coil designed for high temperature drop—insures even outlet temperatures and minimum resistance to water flow.

It is an accepted fact that lower construction costs and more accurate temperature control result with the use of smaller valves and piping required for high temperature hot water. So, if you're considering hot water as your heating medium, remember this—only Herman Nelson Unit Ventilators permit you to take full advantage of its economies and still maintain the highest standards of classroom heating, ventilating and cooling. Proof? Plenty of it based on many outstanding installations over a period of years. For complete information, write Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

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COOLING, HEATING,
VENTILATION, ODOR CONTROL,
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All at minimum cost



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UNIT VENTILATOR PRODUCTS
American Air Filter Company, Inc.
SYSTEM OF
CLASSROOM HEATING, VENTILATING AND COOLING

School Designed Exclusively for Crippled Children • Volunteer Workers Spend Equivalent of Six 40 Hour Weeks on Annual Report in Newspaper Format • Homemade Sound Film Helps Win 3 to 1 Vote Favoring Bond Issue

THE VOTE at Kewanee, Ill., was 3 to 1 in favor of the $1,390,000 bond issue, thanks in part to a homemade magnetic sound film.

A local photographic supplies dealer suggested to Supt. K. B. Beasley that the film would help sell the taxpayers on the need for a new grade school and a new high school and offered to help make it.

So the two of them made a colored film which included a tour of the interior of the old building with two student escorts, some exterior shots, parts of high school football games, and pictures of a new school building in a near-by community. One sequence showed a small boy with a piece of chalk at a chalkboard. He pointed out that the new school would cost each parent only as much as one cigaret a day.

The school glee club and the band recorded music for the sound track on tape. This then was rearranged to make one continuous musical track to accompany the script, which was written and narrated by Supt. Beasley.

The completed 800 foot film was shown at meetings of high school students, P.T.A. members, local service clubs, and Kewanee's school building committee.

"BUSINESS OPERATIONS . . . are required to report to their stockholders and consider it only sound business practice. School boards rapidly are becoming convinced that 'their stockholders' are entitled to equal treatment."

This paragraph is part of an editorial in the *Messenger*, the annual report of the schools at Mentor, Ohio. The report, in newspaper format, was written by volunteers and illustrated with pictures taken, for a reasonable figure, by a *Cleveland Press* photographer during his spare time.

Two members of the board of education at Mentor were Noel Wical, schools' editor of the *Cleveland Press*, and William Ware, Sunday copy and makeup editor of the *Cleveland Plain Dealer*. Another Mentor resident, Francis Paulson of the Sohio Publications, Cleveland, and three high school teachers also agreed to help.

Teachers Howard Barnes and C. O. Hutton investigated, accumulated and organized a vast amount of information about all phases of the local educational system. This was then turned over to Mr. Wical and Mr. Ware, who wrote the articles. They and Mr. Paulson, while driving together to and from their Cleveland offices, planned the day-to-day strategy as the paper began to take shape.

When four-fifths of the articles had been written, the staff spent a Saturday afternoon and evening laying out dummies, reading galley proofs, and writing heads and additional copy. Mr. Paulson and O. B. Moor Jr., a teacher, acted as co-editors.

Staff members performed two or three more after-hour proofreading jobs, and then the paper was ready to be printed. Most of the work was done during staff members' spare time; they spent the equivalent of six 40 hour weeks working on the report.

Among the headlines in the newspaper were "Mentor Schools Mold Youths in Three R's, Citizenship," "Grads Move Into Varied Jobs and Careers," "Lunchroom Big Business," "Mentor Leaving County System for 'Home Rule' Operation July 1," "Staff Has 1200 Years' Experience," "Swollen Classes Are a Big Threat to Good Teaching," "163 Staffers Run School System," and "Bus Fleet Rolls 883 Miles Daily Hauling Pupils."

Faculty members combined a school census with door-to-door delivery of the *Messenger*.

"Aside from the achievement of creating a highly readable and attractive stewardship report from the board of education to the citizens," said Mr. Moor, "the editors feel that they have accomplished their purpose with a minimum of financial outlay. . . . [They] were able to have printed 5000 copies of the *Mentor Schools Messenger* for considerably less than $400."

ONLY THE CRIPPLED need apply for admission to one of Philadelphia's newest schools.

Pupils in the Widener Memorial School for Crippled Children are victims of cerebral palsy, infantile paralysis, muscular dystrophy, arthritis, bone tuberculosis. Since a third of them spend all their time in wheel



chairs, while the rest use braces, crutches or special footwear to get around, the building had to be specially designed.

To improve their proficiency in getting around outside the school, pupils practice with a working traffic light to judge the pace they need to cross a street and go up and down model bus and trolley steps and curbs.

In the repair shops they can learn how to adjust and repair the orthopedic appliances they must wear. Clinics offer help to those with limited speech or hearing.

So that the children can get the water exercises they need, the school is equipped with a hydrotherapy tank and a swimming pool. Boys and girls in wheel chairs and on crutches play versions of softball and even basketball in the gymnasium. A physical therapist helps the youngsters with other exercises and muscle training.

The school can accommodate 500 pupils, aged from 5 to 20.

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this report...
on the
BIG TRUTH
about boilers

Out of 86 years of experience in designing and building quality steam generating equipment comes one of the most revealing reports ever written on boilers. We at Kewanee make that statement because these findings are based on fact and truth . . . on careful search and engineering exploration. In it we present:

KEWANEE
RESERVE PLUS RATING

Here you will discover a way to judge boilers so you can be sure of the lowest operating cost—highest efficiency—greatest dependability—maximum flexibility—longer boiler life. You will learn how to eliminate confusion in considering boilers . . . know how to compare like examples and not be misled by vague technical claims. You can be SURE you have made the best buy when you know the BIG TRUTH about boilers . . . and you will choose Kewanee boilers because you know you will save on fuel—get greater efficiency—cut repair bills.

YOU can depend on KEWANEE engineering

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Ross Exchangers • Sunbeam Air Conditioners

THE KEWANEE
REPORT **TELLS ALL . . .**

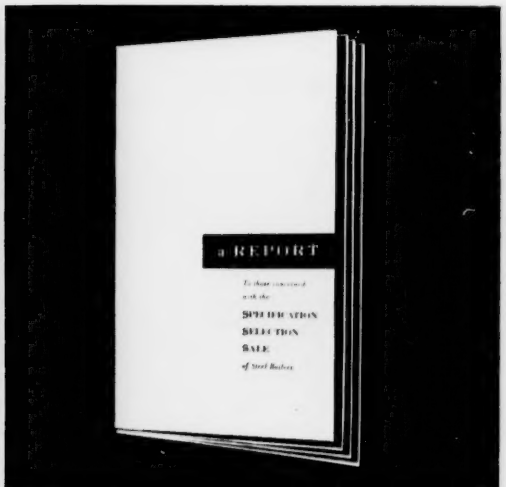
How to cut fuel costs.

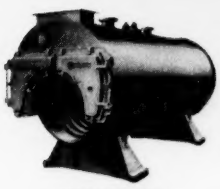
Data on "cruising speed" savings.

Facts on "nominal capacity" operation.

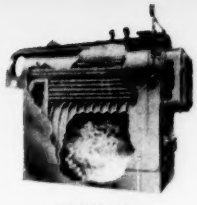
Why Kewanee Reserve Plus is the safe way to rate steel boilers.

Facts on fallacy of buying on "maximum capacity."





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Please send me free book titled, "A REPORT to Those Concerned with the SPECIFICATION, SELECTION, SALE, of Steel Boilers"

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Supt. Frank D. Lawler, whose School Building Committee insisted on the most comfortable lighting, reports . . . . . .



. . . "We wanted the best lighting available so we installed Westinghouse CD Luminaires"

"When we built the new Mary P. Hinsdale School, our School Building Committee insisted on the best and most comfortable lighting available. Westinghouse CD's have certainly lived up to those expectations," reports Superintendent Frank D. Lawler, Town of Winchester, Winsted, Conn.

The Westinghouse CD luminaire, with plastic shielding, provides a semi-indirect lighting system. Installed in continuous rows, as is shown in this classroom, the result is an almost glareless system of comfortable lighting. The entire ceiling becomes a part of the lighting system; all lamps are completely shielded.

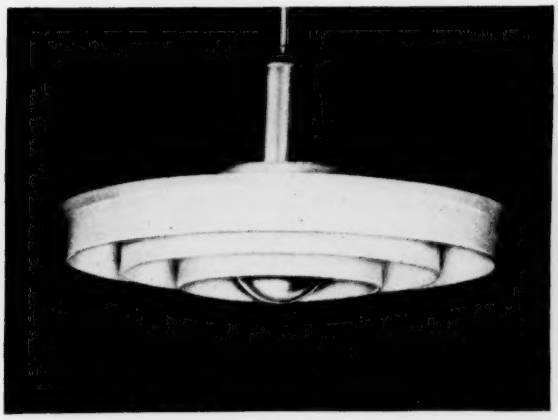
What's more, the Westinghouse CD makes an attractive addition to the classroom. Its design simplicity fits as a natural part of the background in modern interiors.

The superintendent further reports, "Our teachers and the school board are very pleased with the new lighting system. Their enthusiasm and that of our parents will undoubtedly influence both future construction and any remodeling of present classrooms."

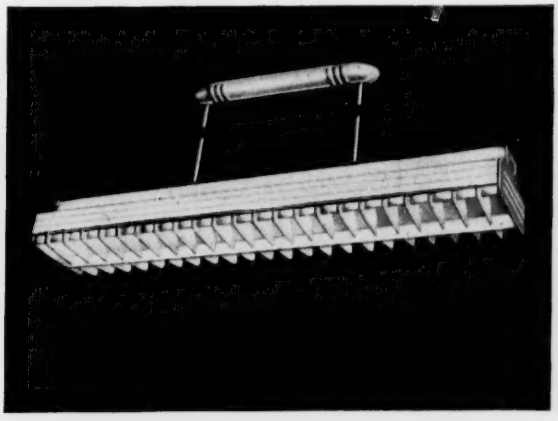


For other installation methods, get B-4556, "The ABC Plan for School Lighting". Meantime—*look for this seal on your electrical contractor's guarantee. He installs them—we back him up.* Westinghouse Electric Corp., Box 868, Pittsburgh 30, Pa. J-04340-A

And to meet other requirements . . .



Low FIRST cost Concentric Ring incandescent luminaires meet quality lighting requirements on limited funds. Metal rings shield silvered bowl lamps, eliminating glare and shadows.



CC Luminaires mean economy in fluorescent lighting. Low in initial cost—low in maintained cost. CC with X° louver design meets A.S.A. school standards.

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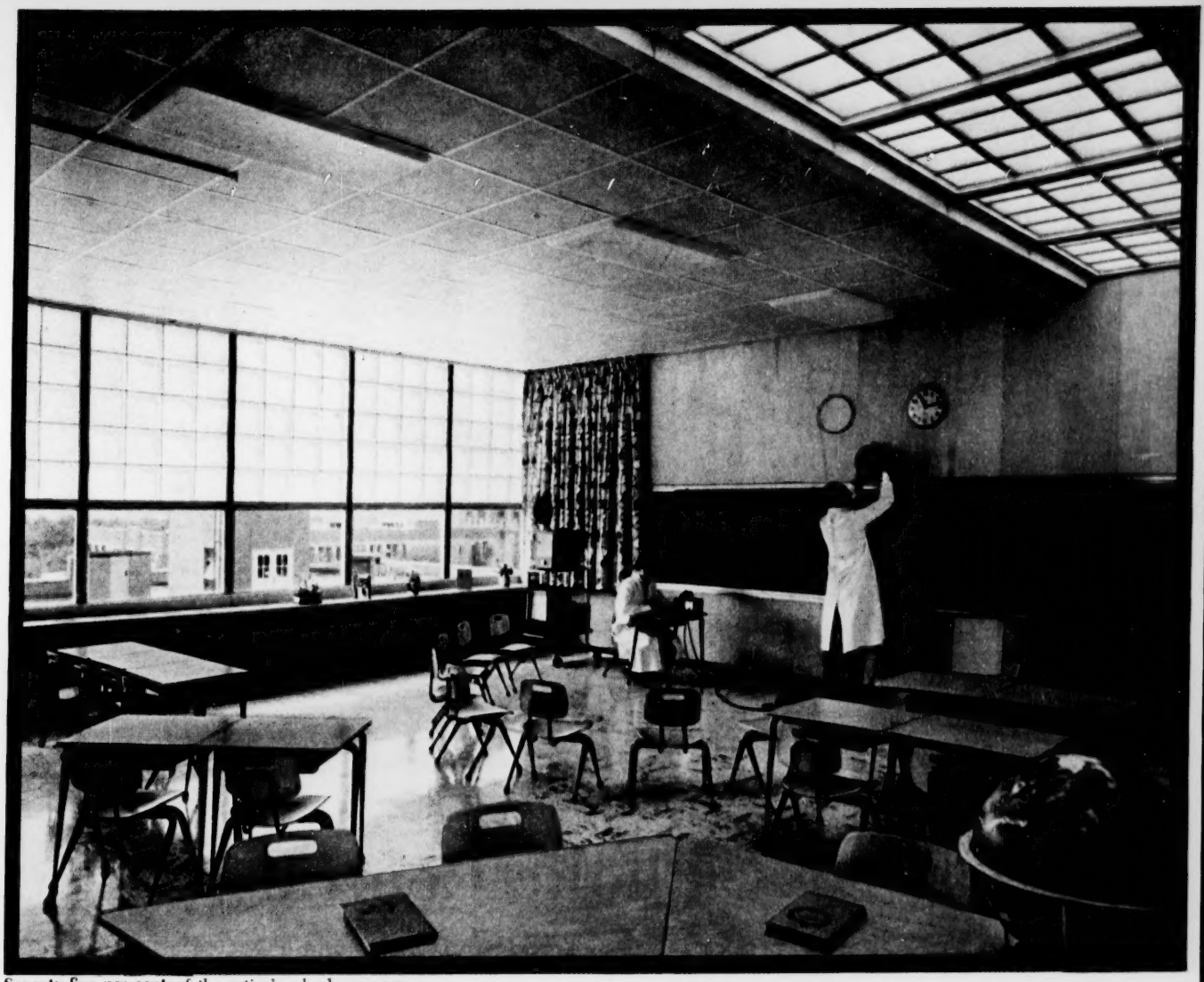
Budget Control

Take a good look at the ledger illustrated. It's designed by Burroughs for convenient and informative reference . . . to provide up-to-date reports with simple, fast, accurate machine operation.

Get a demonstration of the Burroughs Budgetary Accounting Machine, and you'll be impressed with its simplicity of operation . . . speed in posting. What's more, it mechanically prevents posting errors caused by the operator's picking up previous balances incorrectly.

Burrough's special booklet on streamlining accounting and management reports is packed with helpful information on how the Burroughs Budgetary Accounting Machine simplifies preparation of the Budget Ledger as well as all other accounting operations. Just contact your nearest Burroughs branch, listed in the yellow pages of your telephone directory. Or write Burroughs Corporation, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S **Burroughs**



Seventy-five per cent of the nation's schoolrooms are operating today with less than the required minimum daylighting standards. Contrast many of those that you know with this bright colorful room.

Toplite and Light-Directing Glass Block provide complete flexibility necessary in modern schools; offer freedom in design, decoration and choice of equipment.



America's most advanced schoolroom

HERE is a classroom in which there will be less eyestrain, better work, less fatigue and better morale. This classroom gives educators their first glimpse at a long-sought goal—a more wholesome environment for learning.

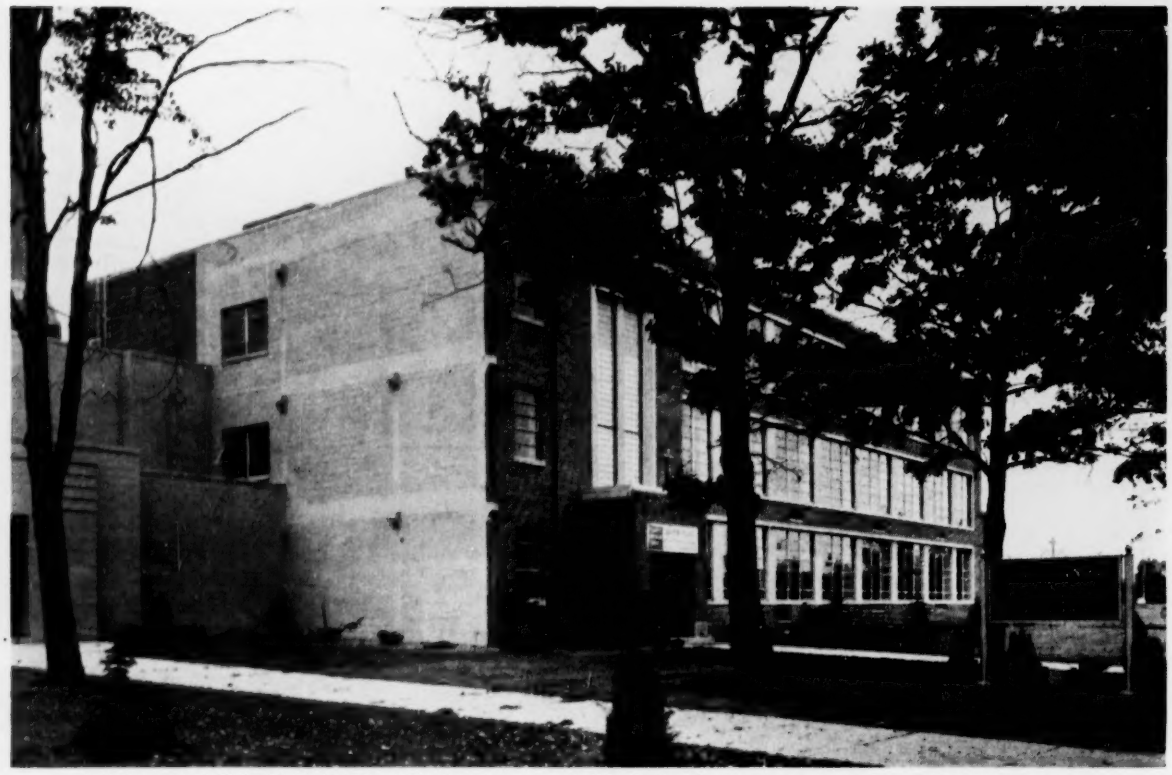
Toplite Panels in the roof and Light-Directing Owens-Illinois Glass Block* in side walls make such a schoolroom possible. With this proved combination it is easy to get proper *quantities* of the right *quality* of daylight in all areas of the room. It is no longer necessary to confine close detail work to the area nearest the windows. With Light-Directing Glass Block, there is no glare and no shades are necessary. They harmonize with the finest interior decorations.

The ideas perfected in this "classroom of tomorrow" are available to you, *today*. Write for the details. Address: Classroom Research, Owens-Illinois, Department **NS-6,** Box 1035, Toledo 1, Ohio.

**Formerly known as INSULUX*

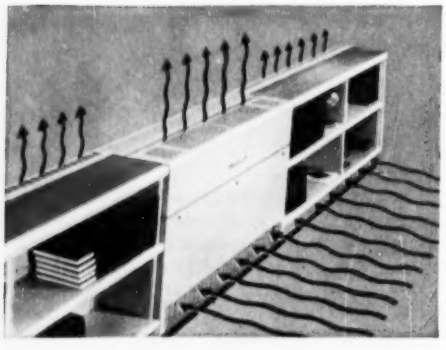
GLASS BLOCK AND TOPLITE PANELS
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Catholic Central High School, Detroit, Mich. Superintendent of Schools, Archdiocese of Detroit, Rt. Rev. C. S. Deady. Architects, McGrath & Dohmen. Engineers, Snyder & McLean. Heating Contractor, J. L. O'Loughlin Co.

Detroit's Catholic Central High chooses Nesbitt Syncretizers



The Nesbitt Syncretizer with Wind•O•Line radiation assures you of solid *comfort* throughout the entire room. Downdraft protection and room heating are handled separately. You get complete protection from cold surface discomfort even when room air temperature is normal and ventilation unit stops heating. The package shown above consists of a unit ventilator, with finned-tube radiation extending to each side, and matching storage cabinets.

The new Catholic Central High School in Detroit is a beautiful example of modern school design at its finest. It's a practical, *functional* design, with large glass areas and airy, well lighted classrooms. But, unlike many schools with big window areas, there's no heating problem at Catholic Central — even in the coldest weather.

For Catholic Central has eliminated chilling downdrafts by installing Nesbitt Syncretizers. These good-looking heating-ventilating units insure the comfort of *all* students in *all* weather. They turn "walls of ice" into "blankets of heat."

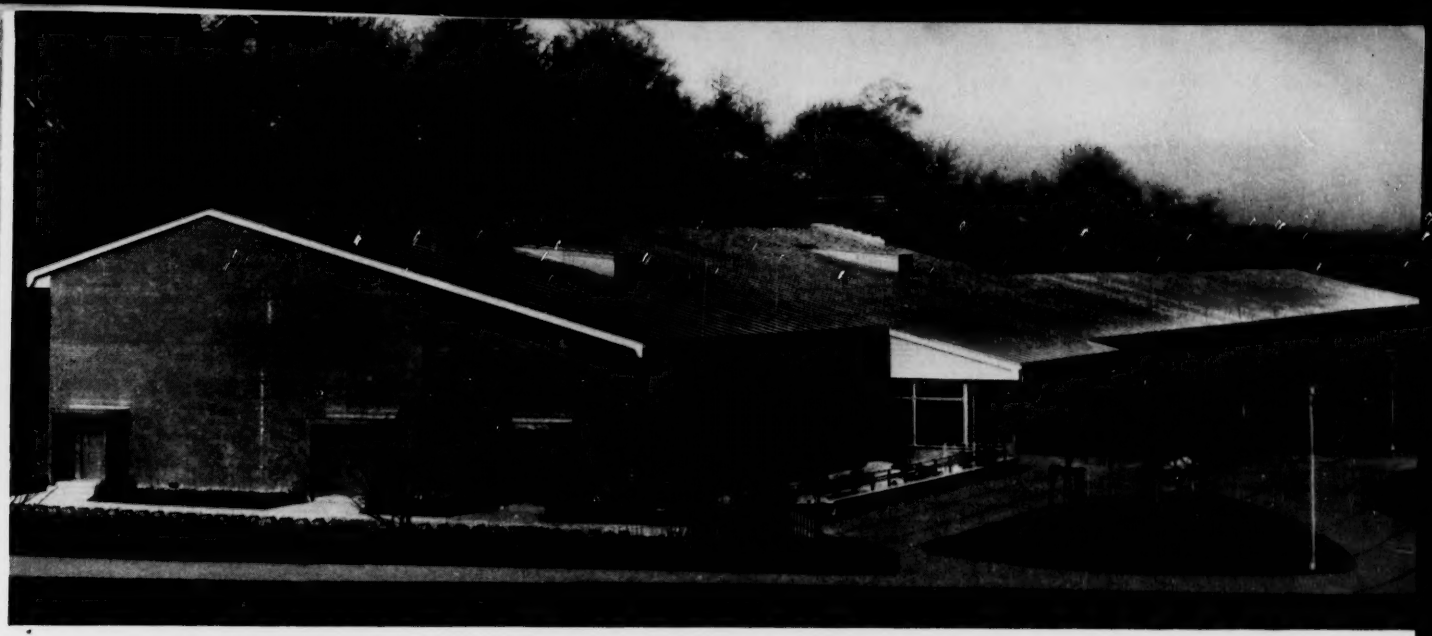
For complete data on the Nesbitt Syncretizer with Wind•O•Line radiation, contact your nearest American Blower Branch Office.

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THE ROOF of the new Walnut Grove School, West Mifflin Borough, Allegheny County, Pa., is USS Stainless Steel. Architects: Button and McLean, Pittsburgh, Pa. Contractor: Nicholas LeDonne, Clairton, Pa. Roofing contractor: Limbach Company, Pittsburgh.

New Walnut Grove School has a maintenance-free roof of Stainless Steel



INSTALLING the standing-seam USS Stainless Steel roof on the new Walnut Grove School. The roof was laid on double-coated asbestos felt with each cross seam carefully caulked before the upper sheet was installed.

● The school board of West Mifflin Borough, Allegheny County, Pennsylvania, took care of roof maintenance almost permanently when the new Walnut Grove School was built. They did it by specifying a roof of long-lasting USS Stainless Steel.

The roof is approximately 385 feet long and 75 feet wide. The Stainless Steel roofing panels have a satin-type architectural finish. They are of 26-gage material fabricated into a standing seam panel 27⅜" wide by 12 feet long.

Stainless Steel's superior corrosion resistance, combined with its almost complete freedom from maintenance, fits it for years and years of satisfactory service. It has excellent reflective properties, and features needed strength with light weight.

The Stainless Steel roofing sheets are laid on double-coated, 35 pound asbestos felt. Each cross seam is caulked and the roofing is locked into the Stainless Steel gutter. Gutters and downspouts are of 22-gage Stainless Steel, architectural finish.

In addition, all attachments, supports, hanger bars, bolts and screws are Stainless Steel.

Stainless Steel is finding wide favor with school architects, not only for roofing, but for exterior walls as well, when used in the form of insulated panels. Of course, its wonderful possibilities for interior trim are also being used to advantage.

If you have a new school in the planning stage, now is the time to think in terms of Stainless Steel and its many benefits. And think in terms of perfected, service-tested USS Stainless Steel. For more information, mail the coupon below. If you like, we will be pleased to have one of our representatives call.

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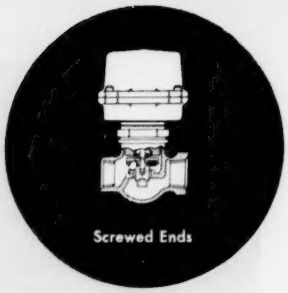

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Thanks to GAS
Institution feeding calls for more than mere nutrition. That's one reason why so many hospitals, schools and other institutions do all their cooking with Gas—it brings out the goodness and appetizing appearance of food. It's also the most economical approach to good commercial cooking. So, good cooks everywhere agree—GAS is best for cooking. American Gas Association.

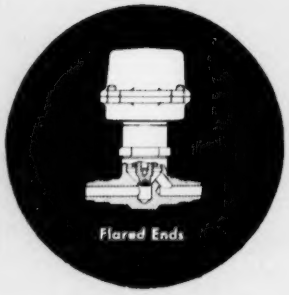

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Silite "commercial" trays are easier to handle and better looking — yet each Silite Tray will completely withstand mechanical dishwashing, warpage, distortion or loss of original beauty of design. They resist mild acids, alkalies, boiling and long hard use!
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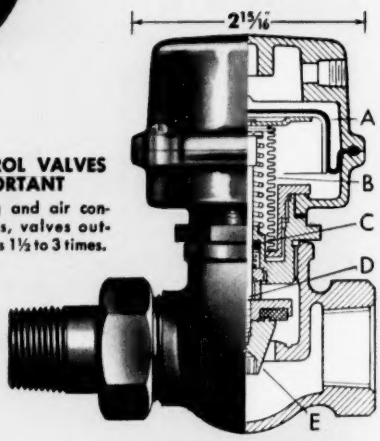


DURABLE AIRTIGHT CONSTRUCTION

GOOD CONTROL VALVES ARE IMPORTANT

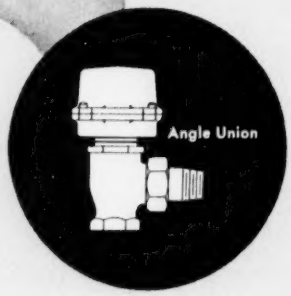
On many heating and air conditioning systems, valves outnumber thermostats 1½ to 3 times.

Available in Various Types and Sizes



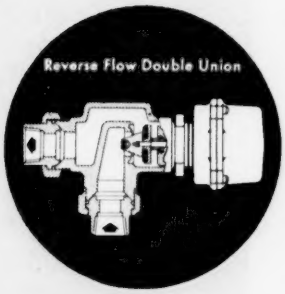
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B) Bronze Bellows, Primary Seal
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D) Polished Stainless Steel Valve Stem
E) Characterized Throttling Nut



More ACCURATE Control with Powers PACKLESS Valves

Minimum valve stem friction. No packing nut or gland to be tightened, oiled or adjusted. No binding of valve stem as with conventional packing. Powers **duo-seal construction** assures better performance and—



No Packing Maintenance. No Leakage of Water or Steam. No Loss of Vacuum.

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(b72)

Gold Seal Nairn Inlaid Linoleum



Consider these virtues that make Gold Seal Inlaid Linoleum more economical in the long run than almost any other floor covering. It's virtually seamless-smooth . . . with no dirt-catching cracks. It's tough—so tough it reduces replacement problems. Installations giving service to heavy traffic for over 30 years are still in business. And its remarkable blend of resiliency and resistance stands up under heavy furniture . . . gives maximum comfort under foot. "Veltone" in 18 patterns. "Jaspe" in 6 patterns. "Plain" and "Battleship" in 10 solid colors. 1/8" gauge with burlap back. 6' wide by the yard. *Our elephant's ears are Gold Seal "Jaspe"; his tusks, "Battleship"; his head, "Veltone"; his hat, "Plain" Linoleum.*

Write to our Architects' Service Department for the free illustrated booklet "Which Floor Goes Where in Commercial Areas."

GOLD SEAL ® **Floors and Walls**

CONGOLEUM-NAIRN INC. Kearny, N. J. © 1954



He's an Expert

a representative of the better restaurant equipment dealers in your community.

This fellow is a Restaurant Equipment Dealer salesman. He's getting ready to start out on his round of calls for the day. Maybe he'll call and see you. If you are on his schedule, you'd do well to hear his story. Why? Because his business is based upon the success of your business.

And, he's by no means an order taker. He's a creative salesman—an idea man. His experience, training and background are at your service to help you solve difficult, complex problems. Many times his ideas, born of experience, have given establishments like yours a healthy boost in business profits.

He's backed to the hilt by a reputable business enterprise. His boss is a respectable member of your community; a man whose business investment makes him your colleague.

You won't have to buy blind from this salesman. His boss maintains a clean, modern showroom where you can inspect equipment in which you may be interested.

Let's suppose you purchase an item from this man. What happens then? First, delivery will be prompt because the better dealers maintain adequate warehouse and delivery facilities. Then, expertly trained installation men see that your item is installed and working properly. Service specialists are on call to keep your equipment in tip-top shape.

Yes, this man is a personal representative of a better Restaurant Equipment Dealer; an organization whose business is based on the growth and success of your business.

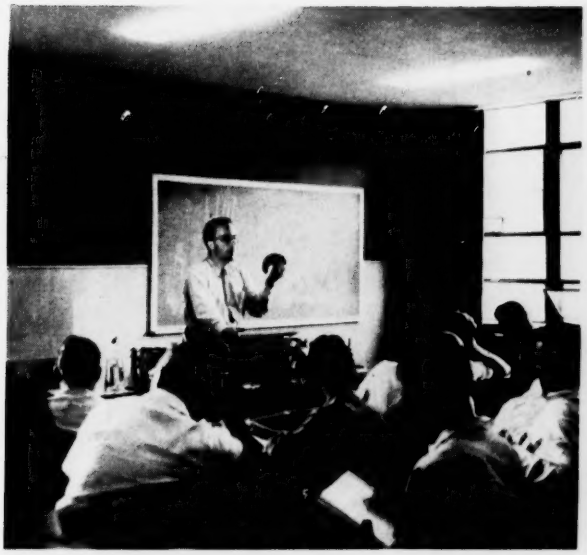
Our Restaurant Equipment Dealer knows that competition is too tough and his customers too smart for him to survive long unless he keeps up with new industry developments. So, his day never ends at any set hour.

Regularly, our man attends a meeting of other salesmen within his own organization; meetings held for the specific purpose of interchanging ideas and improving selling techniques. Equipment is thoroughly analyzed and studied to see how it can best benefit you. Product literature is discussed and incorporated into each man's selling kit so that he can answer your questions on the spot.

Then, he goes to school. Michigan State College holds a two week long session (sponsored by the National Association of Food Equipment Manufacturers). He also attends the American Gas Association's series of sales clinics and, of course, he never misses clinics held by individual manufacturers. And, there are numerous trade shows that he must attend to keep abreast of the latest equipment manufactured for your needs.

On top of all this, he must be right up to the minute on news about his own business. For that reason, it is not unusual to find him burning the late oil while going over the pages of leading publications serving the hotel and restaurant field.

This man and the better dealer he represents can be of great help to you in your business. Why not call him today?



Our Salesman Attends School — The National Association of Food Equipment Manufacturers holds its second two-week product and sales course at Michigan State College. He also attends the American Gas Association's series of sales clinics and, of course, he never misses the excellent dealer clinics held by individual manufacturers.



... Studies at Home. Many nights throughout the year are devoted to "after-hours" study. In the quiet surroundings of his own home, our salesman brings himself up to date on important business developments by studying the pages of his favorite business magazines, as well as product literature from manufacturers.



... Attends Trade Shows. For the purpose of learning more about the equipment he sells and the companies who manufacture it, he attends all important national and regional trade shows. There, too, he meets and exchanges ideas with other members of his own industry.



... Participates in Periodic Sales Meetings. Generally, the better dealer will hold periodic sales clinics for his own men. Such meetings are for the specific purpose of studying new equipment and discovering new ways and means of being of greater service to you — The Customer.

This industry service advertisement is sponsored and paid for by the Ahrens Publishing Company, Inc.

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RESTAURANT EQUIPMENT DEALER • HOTEL MANAGEMENT • RESTAURANT MANAGEMENT • HOTEL WORLD REVIEW • TRAVEL AMERICA GUIDE • FROZEN FOOD AGE

consult your food service equipment dealer he is an expert adviser



FOR "THE SAFE WAY OUT!"

Insist on Von Duprin

Fire and Panic Exit Devices

TO MAINTAIN a rapid and efficient flow of traffic at *all* times . . . to assure "the *safe* way out" for every student and teacher in event of fire or panic . . . take these two precautions:

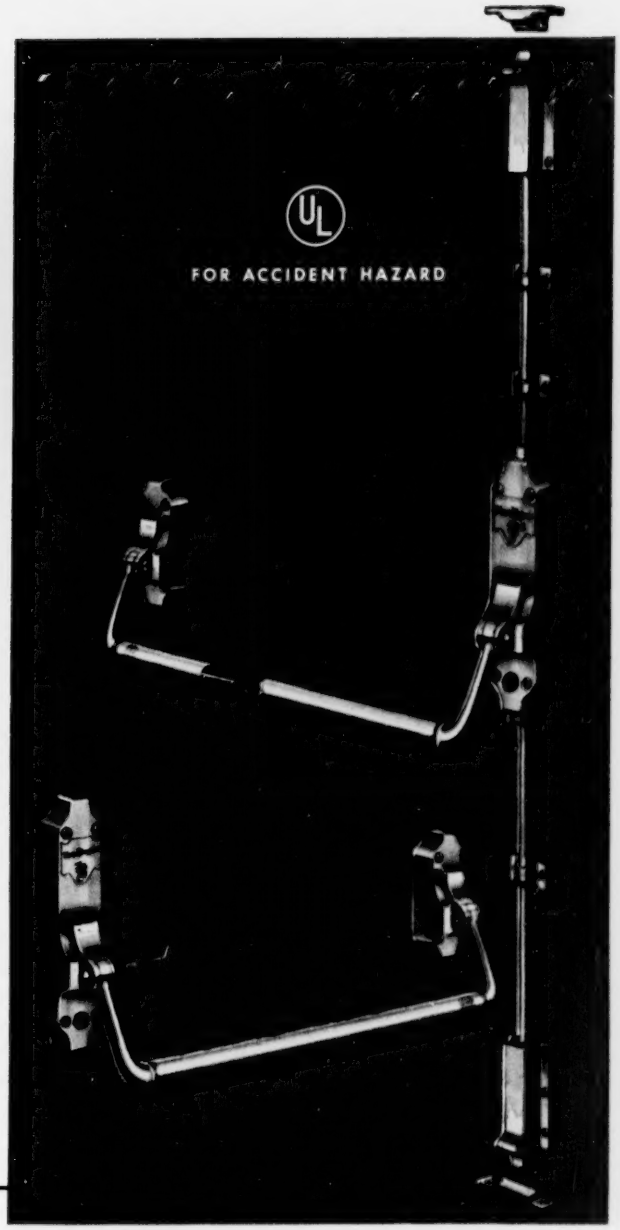
(1) Make sure that every exit is unlocked and unobstructed.

(2) Make sure that all doors are equipped with Von Duprin exit devices.

Whether used thousands of times daily or once in a lifetime, there's never any doubt about the easy opening of Von Duprin-equipped doors, because Von Duprin drop-forged devices are built to last—and operate unfailingly—as long as the building itself. Approved by Underwriters' Laboratories, Inc. for accident hazard, they are easy to install and require practically no maintenance . . . absolutely foolproof in operation, as pressure applied in any manner on the crossbar instantly releases the latch.

Safety is your No. 1 responsibility. So make sure that your school is equipped with the nation's No. 1 exit devices—Von Duprin. Ask your local Von Duprin representative for full details on the B^2 device shown opposite . . . or for information on the complete Von Duprin line covering models for every type of exit. Do it soon.

Built to last a lifetime — Von Duprin B²

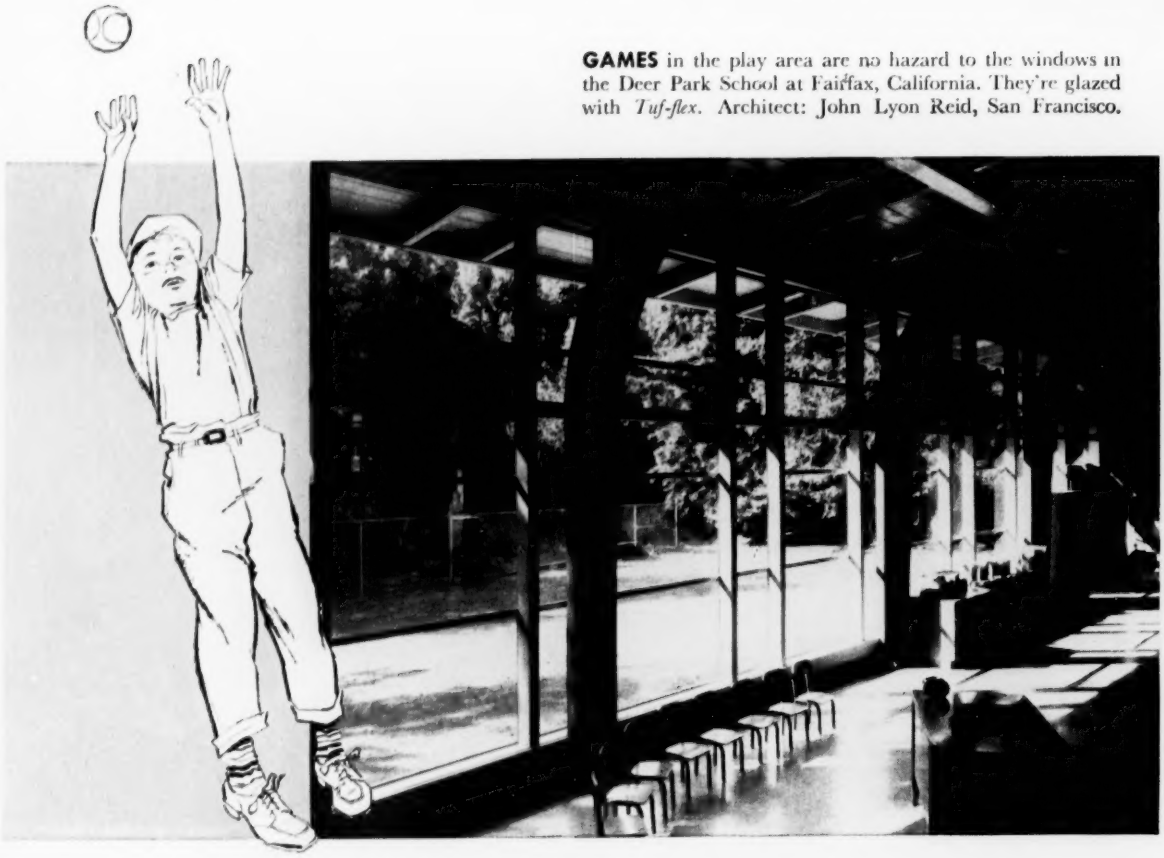


- Accepted as the finest available vertical rod type exit device, incorporating every known refinement.
- Completely drop-forged device of architectural bronze with interior parts of bearing metal to assure lifetime quality, never-failing performance and harmonious design.
- Double acting crossbar is X-bar reinforced its full length. Pressure either up or down will release latches and open door.
- Dogging features at each end of crossbar have direct drive into lever arms. Double compression springs used throughout.
- Top and bottom pullman type latch bolts with independent action, ¾" throw bolt pivoted on monel metal axles, ball compensating vertical rod connections, and steel bushings on cam pins and axles.



CALL IN YOUR VON DUPRIN "EXIT SPECIALIST"—For expert consultation, your local Von Duprin representative brings years of experience in school exit planning direct to your desk. Get to know the Von Duprin man in your area. He has the full facts on the full line of Von Duprin devices and accessory hardware. For his name, write:

VONNEGUT HARDWARE CO.
VON DUPRIN DIVISION, INDIANAPOLIS 9, IND.



GAMES in the play area are no hazard to the windows in the Deer Park School at Fairfax, California. They're glazed with *Tuf-flex*. Architect: John Lyon Reid, San Francisco.

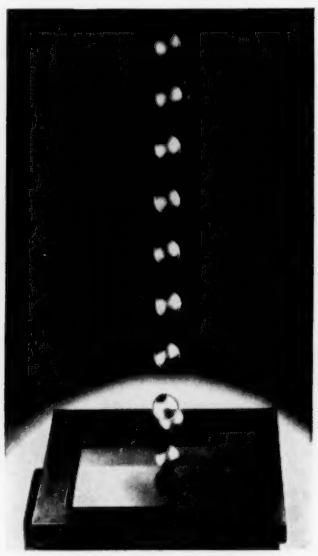
THESE WINDOWS ARE 3-TO-5 TIMES TOUGHER

It is a characteristic of school windows that they are apt to get in the way of balls and other boy-propelled missiles. For this reason, many school boards have found *Tuf-flex** Tempered Plate Glass an excellent investment, especially on the playground side of the building.

Heat tempered during manufacture, *Tuf-flex* has three-to-five times the strength of regular plate glass of the same thickness. It withstands proportionately greater impact.

This makes *Tuf-flex* the wise choice for school windows facing playgrounds and for other locations where special hazards or vandalism have made reglazing a constant expense.

Test a piece of *Tuf-flex* yourself. See how it can reduce the cost and danger of broken windows. Call your L·O·F Distributor for complete information or write Libbey·Owens·Ford Glass Company, 8964 Nicholas Building, Toledo 1, Ohio. *®



LOOK AT THIS TEST! This shows a half-pound (1-3/8" diam.) steel ball being dropped on a piece of 1/4"-thick *Tuf-flex* from a height of ten feet and bouncing off without damaging the glass. If maximum impact resistance *is* reached, *Tuf-flex* disintegrates into small, relatively harmless pieces.

TUF-FLEX *TEMPERED* PLATE GLASS

Made by LIBBEY • OWENS • FORD GLASS COMPANY



This is the type of dream kitchen your students look forward to in homes of their own.

The kind of kitchen students dream about...

They want to be modern...cook Electrically!

Because most home economics students are potential homemakers—because more homes every day are being equipped with modern *Electric* Ranges—students expect to have this modern range in homes of their own some day. That is why they need instruction in *Electric* Range cooking—why such instruction is necessary in your schools.

To keep your home economics laboratories constantly up to date, it is important to have *Electric* Ranges, and to have the latest models. If yours are out of date, your local electric light and power company, or electric appliance dealer, can advise about installing new ones.



School Laboratory Plans— **To be sure your schools' home economics laboratories are modern, why not check them against the helpful FREE booklet—"The Modern Home Economics Department"? This valuable piece of literature includes suggested floor plans and other practical material, gives examples of how other schools arrange and equip their laboratories. Use the coupon to get your FREE copy!**

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Please send me, absolutely FREE, copy of "THE MODERN HOME ECONOMICS DEPARTMENT"—home economics laboratory planning booklet.

We have (total number)____students in our home economics classes.

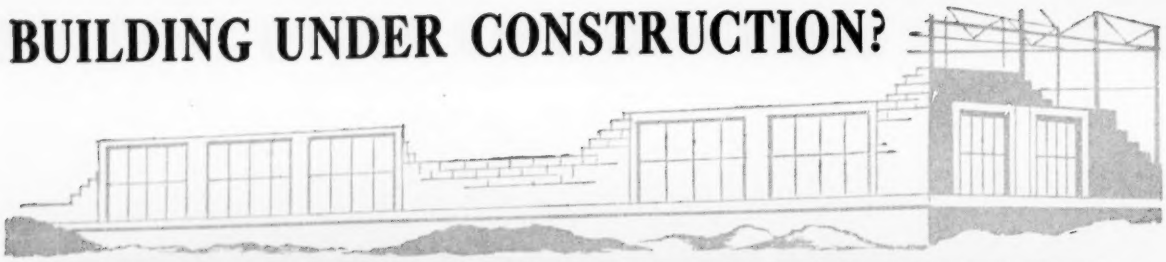
Your name.....

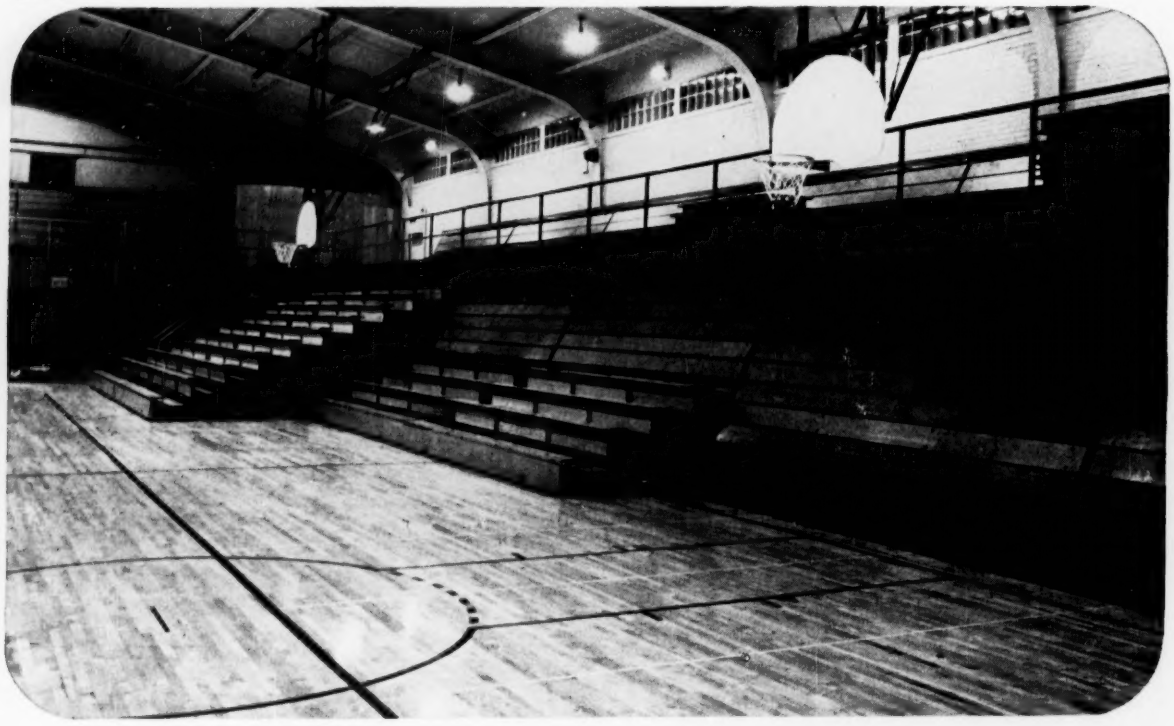
Name of school.....

Street & No.....

City.....Zone....State.....

BUILDING UNDER CONSTRUCTION?





Now Is The Time To Plan Gymnasium Seating with *Universal* Roll-A-Way Stands

Perhaps you are planning a new school or already have it under construction. But what's been done about gymnasium seating? Right now is the time to determine what stands will best meet your requirements... and place the order. Otherwise, delivery and installation may be delayed beyond the date desired.

Carefully engineered and custom-built to meet your specifications, *Universal* Roll-A-Way Stands are ideal for large capacity or small. They are compact, yet roomy and comfortable... neat and attractive... exceptionally strong and safe. When not in use, they may be folded back to the walls, providing approximately 70% more floor space for regular gymnasium activities. Write for free catalog and list of *Universal* installations.



The standard style *Universal* Roll-A-Way provides a continuous, all-purpose seat at front when stands are closed, as shown above. This row is locked firmly in place and occupies only a small amount of extra depth. A convenient seat for the basketball squad during chalk talks, for physical education classes, etc.; particularly useful for school parties and dances in the gym.

UNIVERSAL BLEACHER COMPANY

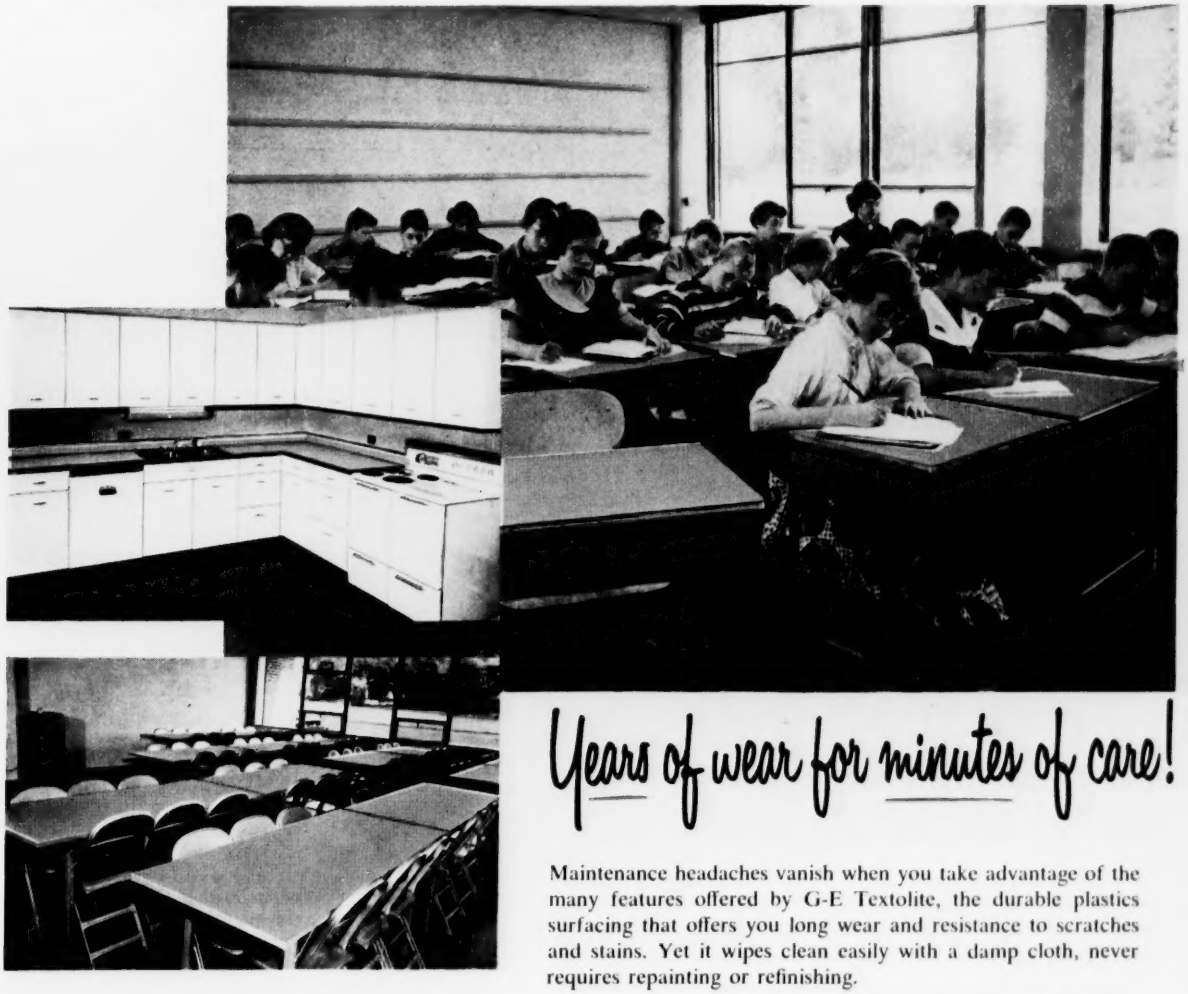
606 SOUTH NEIL STREET • CHAMPAIGN, ILLINOIS



All through the school

G-E TEXTOLITE* OFFERS YOU....

plastics surfacing



Years of wear for minutes of care!

Maintenance headaches vanish when you take advantage of the many features offered by G-E Textolite, the durable plastics surfacing that offers you long wear and resistance to scratches and stains. Yet it wipes clean easily with a damp cloth, never requires repainting or refinishing.

You can use it to advantage in so many places:

Classrooms. For desk tops where proper light reflectance is important.

Home Economics Rooms. Where you want a surface that can take spilled liquids and handicraft supplies.

Cafeterias. For bright, sanitary, easy-to-clean table tops, counters, and kitchen sinks

. . . . . and wherever you want beauty plus extreme durability.

*Reg. U. S. Pat. Off.

For school-planning ideas with G-E Textolite, contact your nearest G-E distributor, or write: General Electric Company, Section 1432-1A, Chemical Division, Pittsfield, Mass.

You can put your confidence in—

GENERAL ELECTRIC



Low in both material and installation costs, Cushiontone is also economical to maintain. This wood fiber acoustical tile can be washed or repainted whenever necessary without loss of acoustical efficiency.

Ceiling holes give school permanent relief from noise

Architect:
H. F. Everett & Associates

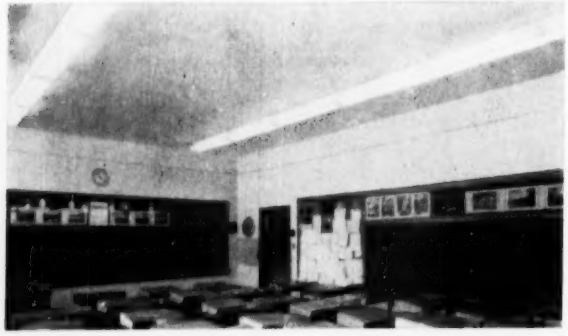
Acoustical Contractors:
Duggan & Marcon
Acoustical Corp.

Holes in the ceiling are considered a real blessing at the Lynn Heidelberg School in Allentown, Pennsylvania. For these holes are the neatly drilled, noise-trapping perforations in Armstrong's Cushiontone Full-Random acoustical ceilings.

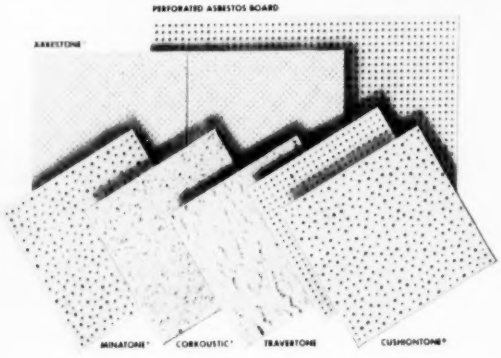
By soaking up disturbing noise, these perforations make schoolwork a lot more enjoyable and rewarding for everyone concerned. Teachers find it easier to keep order in the classroom, and students more readily concentrate on lessons.

But quiet is not the only advantage Armstrong's Cushiontone sound conditioning offers. Cushiontone's perforations are varied in size and arranged in a non-directional Full-Random pattern to eliminate the old-fashioned "tiled" ceiling effect. A two-coat, white paint finish helps diffuse light evenly throughout the room without annoying glare.

Your Armstrong Acoustical Contractor will be glad to give you a free job estimate and details on Cushiontone and Armstrong's other acoustical materials. For the free booklet, "How to Select an Acoustical Material," write Armstrong Cork Company, 4206 Wabank Avenue, Lancaster, Pa.



There is little interruption of normal routine when Cushiontone is installed. Cushiontone can be quickly nailed or screwed to wood furring strips or cemented to any hard, smooth surface.



ARMSTRONG'S ACOUSTICAL MATERIALS



THE NEW Wayne PANORAMIC

PANORAMIC DRIVER VISION—156% more clear-view area in those new "Curv-a-Corner" rear windows—no more "blind-spot" driving. • Every window an emergency opening—over 13" unobstructed! • Patented Perma-Safe Dry Wall—with massive 4-bar Fortress Rail! • "Air-Wedge" Emergency Kick-out Windshield (no center post.) • Mar-proof aluminum inner walls (no costly, offensive defacing). • Lockbolted (no "weld weakness" or "rivet wiggle"). Most dramatic step forward in bus body safety since Wayne pioneered the industry's first all-steel bus body in 1930!

WAYNE WORKS, INC. • RICHMOND, INDIANA, U.S.A.



"Film stars are not necessarily accident prone,"

says **BARBARA BRITTON**

starred in "Dragonfly Squadron", an Allied Artists Release,

"but the studios take every precaution to prevent mishaps. They know that accidents mean costly time losses, and sometimes even permanent disability. At best they are usually painful."



EZY-RUG RUBBER LINK MATTING

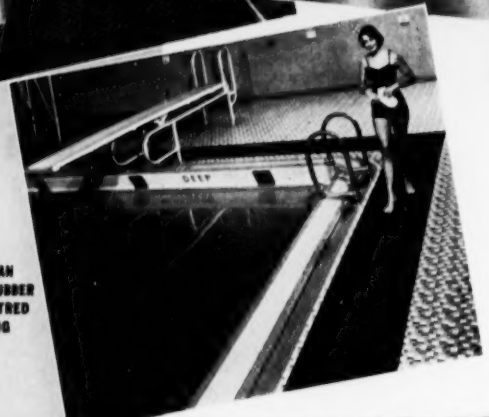


DO-ALL CORDED RUBBER RUNNER



EVER-TRED VINYL PLASTIC LINK MATTING

AIR-TRED SPONGE RUBBER MATTING



AMERICAN CORDED RUBBER COUNTER-TRED MATTING

7 COURSES FOR STUDY BY SCHOOL ADMINISTRATORS

Reduce Those Fabulous Maintenance Costs!

EZY-RUG RUBBER LINK MATTING

Eliminates much of the high cost of mopping, scrubbing and vacuuming. Traps dirt at the door. Eliminates the dirt that is whirled into the air by the heating and ventilating systems. Think how much it costs to redecorate, and refinish floors! Putting Ezy-Rug in your school is like putting extra maintenance men to work for you without putting them on the payroll. Insures slip-proof footing on smooth or wet floors or inclines. Beautifies any entrance. Choice of pattern or lettering in any combination of attractive colors. Any width to 8 feet. Any length. Reversible, the service is doubled.

Prevent Accidents in Manual Training Shops

DO-ALL CORDED RUBBER RUNNER

The deep ribs insure a non-slip surface and afford comfort underfoot. Prevents damage to dropped tools. Also ideal for gymnasiums. Silences footsteps in halls and directs traffic in lobbies. Prevents falls on ramps. Affords protection at drinking fountains. A good dirt remover. In rolls: 40' 10" long, 35" wide, ¼" thick. Four mottled colors: Venetian Red, Erin Green, Delft Blue, Mosaic.

The One Mat for Kitchens and Cafeterias

EVER-TRED VINYL PLASTIC LINK MATTING

Non-absorbent. 100% grease-proof. Effects a comfortable non-slip walking surface and prevents accidents wherever there are wet or greasy floors. Prevents tracking of spilled foods and liquids. Easy to clean. Widely used on drainboards to reduce dish breakage and noise. Five permanently brilliant, fade-proof colors in any combination—any pattern. Any length, any width to 6 feet. 3/16" thick.

Eliminate Fatigue

AIR-TRED SPONGE RUBBER FLOOR MATTING

Provides comfort underfoot at office files, in laboratories and libraries. Silences footsteps. Long-wearing. Easily cleaned with damp mop. Black or maroon. ¼" thick. 36" or 48" wide. Any length to 60 feet.

Stands Up Under Spikes and Cleats

DO-ALL CORDED RUBBER FLOOR TILE

For locker rooms. Especially tough, long-wearing. Subdues noise. Slip-proof even with spikes. Four colors in 9" and 30" squares. 1/8", 3/16" and ¼" thickness.

Prevent Accidents Around Pools and Showers

AMERICAN CORDED RUBBER COUNTER-TRED MATTING

Provides a non-slip footing wherever there are wet floors. Ridged bottom affords aeration and drainage. The floor beneath the mat dries so that the linoleum or tile will not rot nor develop an unsanitary condition. Rolls up for easy cleaning. Thickness: 3/16". Width: 2 feet. Any length.

For Safety on Stairways

DO-ALL STAIR TREADS

The only treads that will withstand school traffic. Slip-resistant, wet or dry. Long lasting. Silences footsteps. Easy to clean. Easily installed with adhesive or tacks. Black, Venetian Red, Sea Green, Delft Blue, Mosaic, in widths up to 72 inches and depths up to 30 inches, in ¼", 3/16" and 1/8" thicknesses.



AMERICAN MAT CORPORATION

"America's Largest Matting Specialists"

1717 ADAMS STREET — TOLEDO 2, OHIO

Please send literature and prices on ☐ Ezy-Rug; ☐ Ever-Tred; ☐ Do-All Runner; ☐ Do-All Treads; ☐ Air-Tred; ☐ Do-All Tile; ☐ Counter-Tred.

Send coupon now for free literature and prices.

NAME

SCHOOL

STREET

CITY & STATE

IN CANADA: AMERICAN MAT CORP. LTD., WINDSOR, ONTARIO

Modern School Furniture With

VIRCOLITE

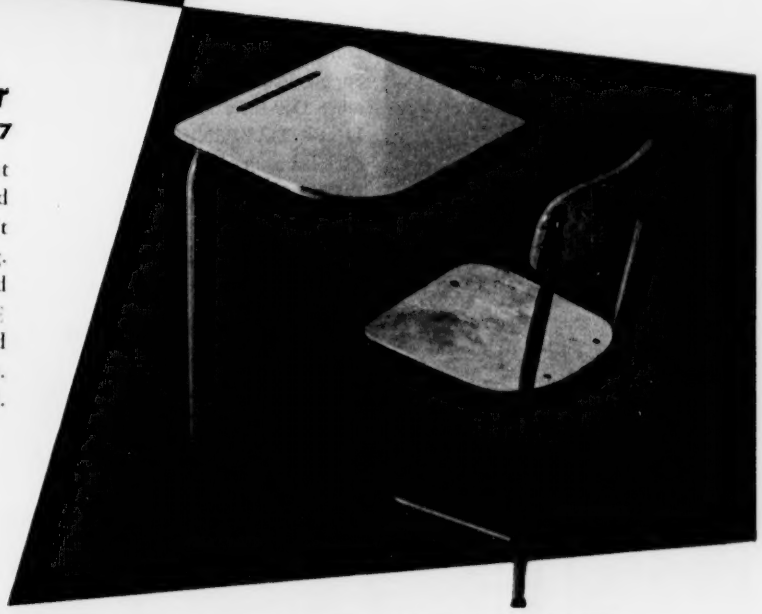
Plastic Tops of Quality



Open Front Desk
Model #724

and Chair **Model #1000**

VIRCOLITE Lifetime Plastic Top resists marring and provides perfect reflectivity for students. Modern desk is constructed of tubular steel, strong and lightweight. Chair features protected plywood seat and solid maple back.
Both moderately priced.



Desk Chair
Model #317

Designed for maximum student comfort, handling ease and sturdiness. Perfectly balanced, can't tip, won't vibrate while writing. Modern 2-in-1 unit for added savings, featuring VIRCOLITE Mar-Proof Lifetime Plastic Top and tubular steel construction. Moderately priced.

NATIONAL SCHOOL SERVICE INSTITUTE — SERVICE TO THE SCHOOL CHILDREN

VIRCO

"MAKERS OF AMERICA'S FINEST SCHOOL DESKS, CHAIRS and TABLES"

Available at better Dealers Everywhere.

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15134 So. Vermont Ave., Los Angeles, Calif.

MAILING ADDRESS — P. O. Box 44846, Station H, Los Angeles, California.
EASTERN SALES OFFICE — 11 W. 42nd St., New York 36, N. Y.

IN THE LOBBY and corridor junctions, attractive patterns of Day-Brite glass enclosed troffers and troffer accent units combine cool fluorescent light and the warmth of incandescent illumination. Strip lighting units using low-brightness fluorescent lamps keep the corridors and stairways well lighted and safe.



ALL-METAL LUVEX® fixtures were chosen to light the library, the classrooms, the cafeteria and the administrative offices. These graceful Slimline fixtures, proved in hundreds of school installations, have an 83% efficiency rating, exceptionally high for a louvered fixture. Also important, LUVEX is moderate in cost.



St. Paul school compares many makes — chooses nine different Day-Brite lighting fixtures



From its handsome main entrance, where Day-Brite DERBY DOWNLIGHTS are recessed into the canopy, South St. Paul Junior High school is a model of good school lighting clear through to the Day-Brite EXIT SIGNS that mark every fire exit.

The school's lighting is built around the famous LUVEX® school lighting fixture. Supplementing the LUVEX are eight other Day-Brite fixtures — the PLEXO-LINE®, DAY-LINE® industrials, glass enclosed troffers, troffer accent units, the PBM®, EXIT SIGNS, strip lighting units, DERBY DOWNLIGHTS — each filling a specific lighting need.

Here is a perfect example of the wide range of lighting problems you face in your highly specialized field — and of Day-Brite's ability to solve each of them most economically and efficiently.

For it's important to remember that Day-Brite was chosen only after direct comparison with other makes.

We urge you to protect *your* school lighting investment the same way. Look at Day-Brite . . . *feel* the difference . . . before you buy!

SEE YOUR LOCAL ELECTRICAL CONTRACTOR

446



A TYPICAL LUVEX® LIGHTED CLASSROOM at South St. Paul High School. Here in the classroom, adequate levels of comfortable, glare-free light are urgently needed to protect young eyes at work. A properly planned LUVEX installation eliminates eyestrain, stimulates the child's ability to concentrate and learn.



YOUR SCHOOL LIGHTING PROBLEMS are of interest to us. We'll be glad to hear from you and help you any way we can. Informative literature is available without cost or obligation. Write Day-Brite Lighting, Inc., 5451 Bulwer Avenue, St. Louis 7, Missouri. In Canada: Amalgamated Electric Corp., Ltd., Toronto 6, Ontario.

TWO GREAT NAMES...



STOCK YARD INN

THE SIRLOIN ROOM
CHICAGO, ILL.

Equipped with **GARLAND...**

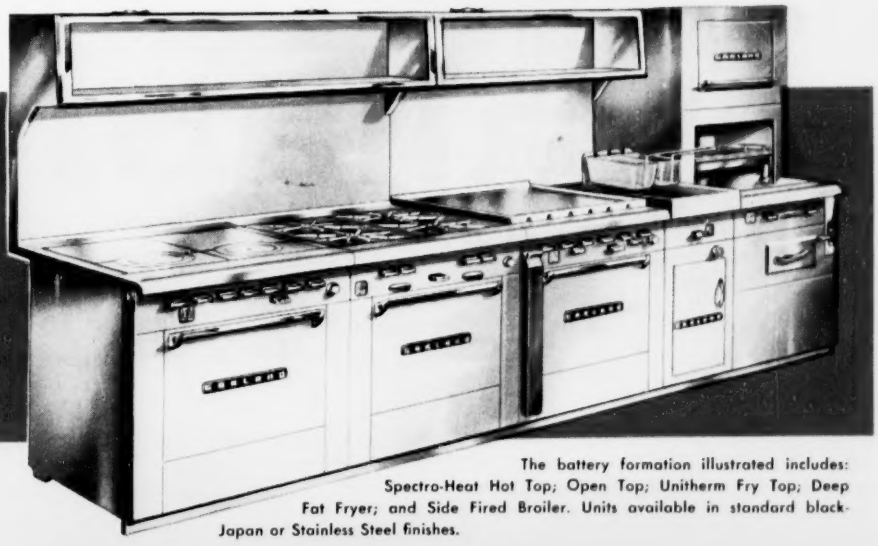
THE GREATEST NAME IN COMMERCIAL COOKING!



THE COUNTRY'S *FINEST*
EATING PLACES CHOOSE GARLAND!

Garland has literally dozens of *extra-special* appeals to chefs and food experts! They like Garland's smooth, clean lines . . . its rugged, "built-in" durability . . . and best of all, its unmatched speed, flexibility, dependability, and economy of operation. And what's more, Garland is fired by gas, *the ideal fuel!* This explains why Garland is used in more leading restaurants, hotels, clubs and institutions than any other make! Get the Garland story from your food service equipment dealer, today!





The battery formation illustrated includes: Spectro-Heat Hot Top; Open Top; Unitherm Fry Top; Deep Fat Fryer; and Side Fired Broiler. Units available in standard black-Japan or Stainless Steel finishes.

Lock for the 45-29 Club pin . . . it's the mark of an expert!

DM PRODUCTS

Heavy Duty Ranges • Restaurant Ranges • Broiler-Roasters • Deep Fat Fryers
Broiler-Griddles • Roasting Ovens • Griddles • Counter Griddles • Dinette Ranges

PRODUCTS OF DETROIT-MICHIGAN STOVE CO., DETROIT 31, MICHIGAN
IN CANADA: GARLAND-BLODGETT LTD.—1272 Castlefield Ave., Toronto

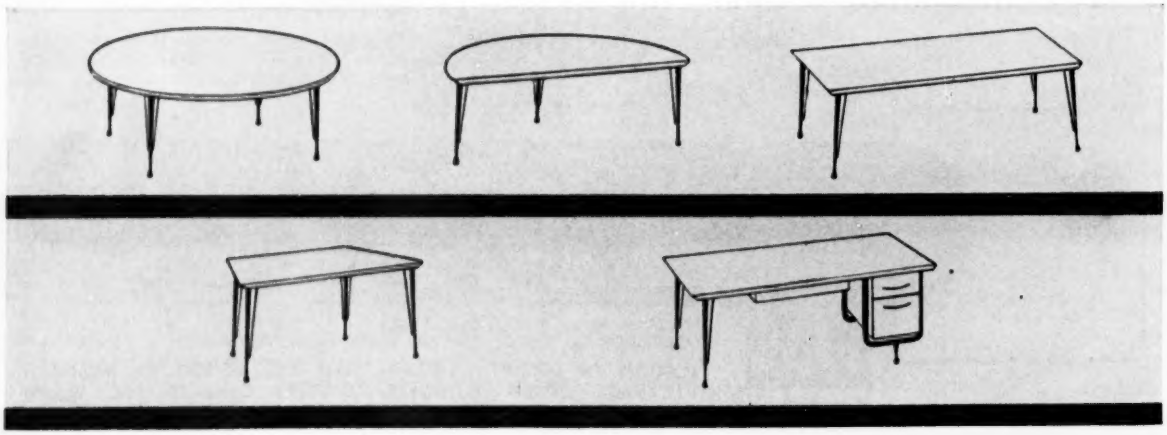


Brunswick

School

Furniture

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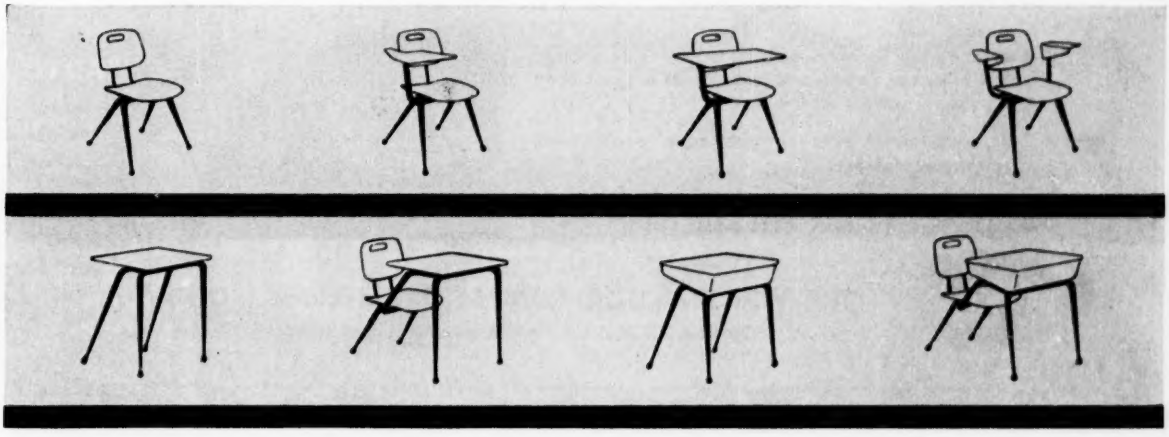
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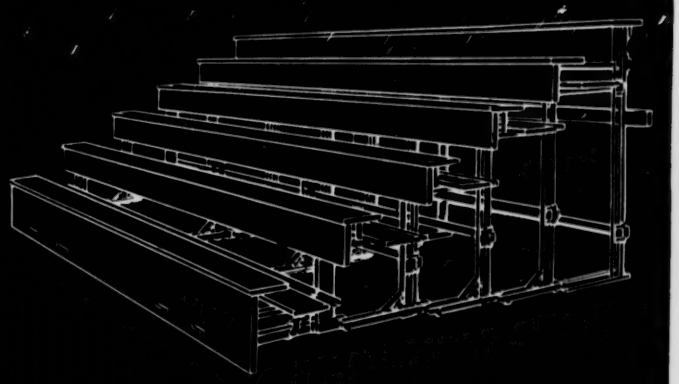


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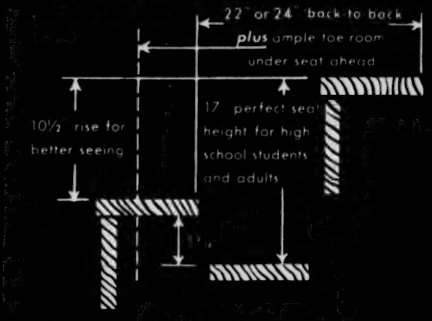
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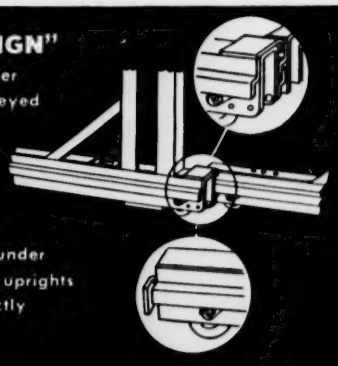
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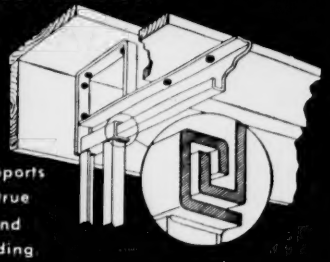
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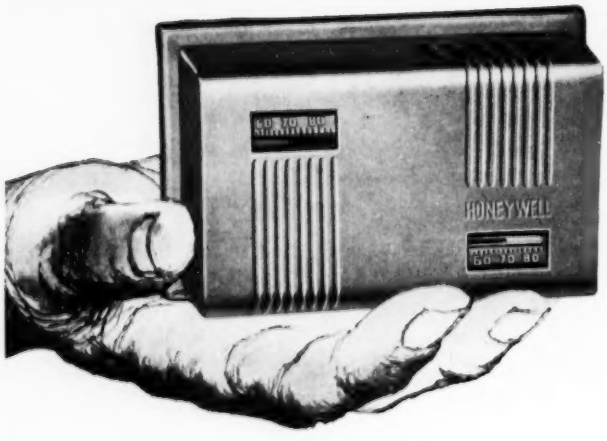
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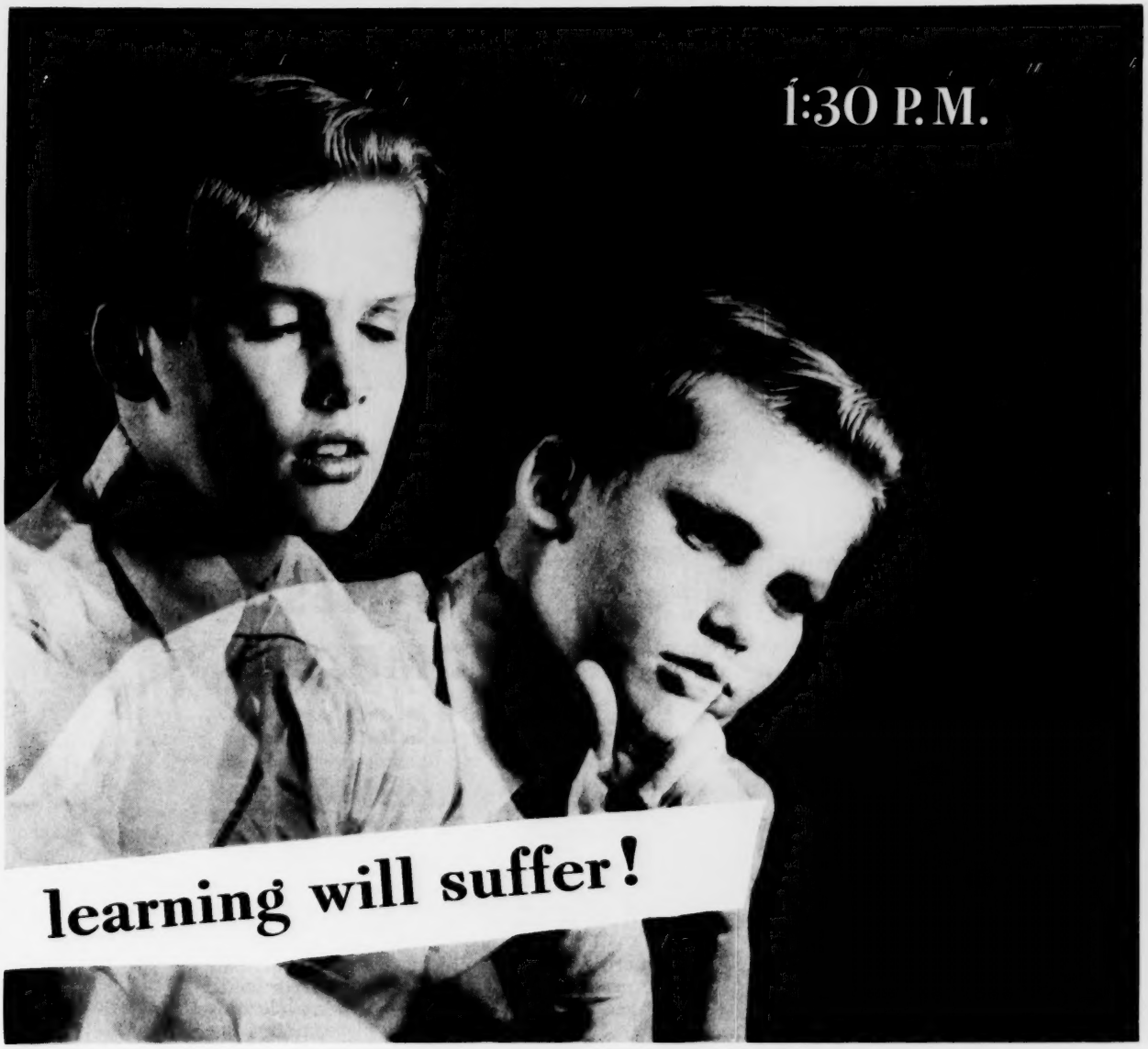


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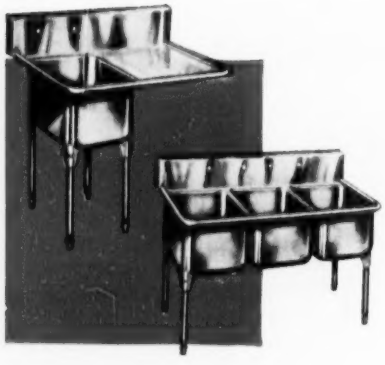
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Looking Forward

No One to Blame?

THE grand jury of Erie County, New York, was "unable to arrive at a conclusion, beyond a reasonable doubt" as to the cause of the fire that took the lives of 15 school children in Cheektowaga, N.Y.

It is reported that the fire followed an explosion March 31 in the Cleveland Hill Elementary School, and 15 of the children who were in the frame annex to that school lost their lives.

It may be, as the grand jury stated, that there is nothing in the law under which anyone could be held responsible, but surely there is a moral responsibility to prevent the recurrence of such tragedy.

The jury found that the heating plant of the annex "was extremely defective, due to the absence of a thermostatic control system for which it was designed." It recommended that the legislature and other authorities establish uniform regulations to control the physical plant operations of schools.

Furthermore, said the jury, "the duties of the custodial personnel of this school were not clearly defined or specifically delegated. Therefore, definite obligations for inspection of equipment, reporting defects, and the remedying of said defects were lacking."

Let's hope that these 15 children may not have died wholly in vain. The parents and all the citizens of the community who mourn the tragic death of these children may well ask themselves if they share some blame for failing to provide funds that would assure adequate and safe housing for their children. Also, were they apathetic and indifferent to the way that school was operated and maintained?

There are many potential Cheektowaga schools in this country. Is there one in your school system?

Get Off the Couch

MR. AVERAGE CITIZEN has been psychoanalyzed by the American Orthopsychiatric Association, meeting in New York. Psychiatrist Jules V. Coleman and Psychologist Ruth Kotinsky agree in their findings that the public is unfairly blaming the schools for "all that goes amiss with the state and its citizens." Seeking a scapegoat, the American community shirks its own responsibility by blaming the schools for divorce rates, careless driving, war and international misunderstanding, lack of interest in religion, and increase in mental illness, say the experts.

School people have known this for a long time; they learned it the hard way and not by resting on a couch. Nevertheless, it's consoling to know that psychiatry and psychology also confirm the diagnosis.

For a Piece of Silver

ALTHOUGH we're still spending $38 billion a year or more in an effort to obtain peace through military defense, Congress is now balking at the expenditure of only $15 million—which is 1/25 of 1 per cent of our military budget—for promoting peace through the international educational exchange program.

On an annual budget of only $15 million the Department of State, in cooperation with the U.S. Office of Education, has conducted an exchange of students, teachers, labor leaders, and other groups with foreign countries that probably has done more toward the advancement of international peace than any other expenditure ever authorized by Congress.

Vice President Richard M. Nixon is so convinced of this fact that, in an unprecedented appearance, he came before a Senate appropriations subcommittee to protest the proposal of the House of Representatives to reduce these funds by $6 million. Speaking from impressions gained during his trip around the world last year, the vice president said that this exchange program gives us "the surest return for our money." It is the "only sure way," he said, "to get within a country to the people who can affect public opinion."

"Our problem," he continued, "is to get our message across—first, letting people know that the Communists say one thing and do something else and, second, to let the people know that the people of the United States share their aspirations."

If changes are made, said the vice president, the appropriation for the exchange program should be increased rather than cut.

Sen. J. William Fulbright of Arkansas, one of the

pioneers in advocating this exchange program, refuted the argument that the House of Representatives was making the cut because of duplication between the State Department and the Foreign Operations Administrations. "The activities of the F.O.A. in the educational exchange program never have received direct congressional sanction," he said. "The duplication, if any, is on the part of the F.O.A."

Readers of The NATION'S SCHOOLS may recall our interviews with some of the foreign educators at the Atlantic City meeting of the A.A.S.A. and also recent articles by Oliver J. Caldwell and Thomas E. Cotner, testifying to the tremendous significance of this exchange program. And yet for $6 million—a mere piece of silver in our total defense program—the budget cutters in Congress would betray a sane and brotherly way of working for world peace.

Who Will Tell the Press?

IS IT a responsibility of the press to give the public an "understanding" of public education?

This question was debated by a panel representing school administrators and newsmen at the annual meeting of state American Association of School Administrators presidents in St. Louis, April 29 to May 1.

President Eisenhower's challenge to the newspaper publishers of America, in his televised address April 22, defined the problem. The President said:

"I do believe most earnestly that the press should give emphasis to the things that *unite* the American people equal to that it gives to the things that *divide* them. . . . Could not reader *understanding* be as powerful a criterion in newspaper offices as reader *interest?*" (Italics are ours.)

Trying to apply these principles to news of the schools, the panel (three superintendents, a publisher, an editor, and a city daily reporter) found it necessary to define terms. What is news? And what do we mean by "understanding"? Does all this mean that the newspaper shall assume or presume to tell its readers *what* to think about the schools?

With the first premise of the President's address the panel was in agreement. It endorsed Mr. Eisenhower's statements that:

"News of events which divide may be more spectacular than news of developments which unify. A free press can discharge its responsibility to free people only by giving all the facts in balance. Facts in perspective are vital to valid citizen judgments. Sound judgment is crucial to the preservation of freedom. Hence a free press can sustain itself only by responsibly reporting all the facts and ideas—the spectacular and unspectacular, the unifying facts and the divisive."

At this point, the agreement ends. Ideally, news about schools should be accurate and balanced. Decision as to what that news shall be, however, is completely the privilege of the newspaper. Legally, it may print what it pleases about schools or totally ignore public education.

Actually, according to members of the press who served on the panel, the information about schools that gets into print is determined by (1) the policies and attitudes of the publisher, (2) the personal judgments of the city editor or the school editor, and (3) the assumptions of the newspaper staff as to what it thinks its readers want to know.

Disagreements that may occur, on the school board or elsewhere in the school, may be divisive, but readers want to know about them. They are facts, and they are "news."

If the press is to give the public an "understanding" about the schools, whose understanding shall it be? Will school people be happy if the newspaper prints only those facts about schools that lead to a predetermined conclusion of the editor?

Why should one assume that the press has all the information, background and experience necessary to form judgments about public education?

Do schools assume that they can indoctrinate the press with those "understandings" which it in turn will preach to its readers?

The newspaper has no business telling the people what to think in its *news* columns. It should strive to give adequate facts—a balanced picture—but its opinions about schools or anything else should be expressed in its *editorial* columns only, said the publisher on the panel.

The understanding of public education must come from much more than the mere reading about schools. It starts in the school itself, with the understanding that children acquire concerning the nature and purpose of public education—with the appreciation that both children and adults have of the school as a social institution. It comes from a deep realization that mass education is a means whereby we maintain and improve our way of living.

Understanding of public education by readers of the newspaper must come in part from better teaching of "how to read a newspaper." There will be better understanding if we have better readers. How well are we teaching all people to seek the truth, to distinguish facts from vicious propaganda, and to think in terms of the rights and welfare of others?

To President Eisenhower and to those of us who are concerned about the attitude of the press toward public education, the words of Alistair Cooke are especially pertinent. Concluding his article on "The Press and the Common Man," which appeared in the *Saturday Review* for March 13, he said:

"Whether the Twentieth Century newspaper is to be big or little, tabloid or telefax, its intelligence, curiosity and integrity will be no better than the education of the people who write it and read it. The mold of the common man's newspaper will be cast in the public schools. A thought that should give tremendous pause."

Quotable

SILENT partners in democracy surrender their birthright.—MAJ. GEN. MILTON G. BAKER, *superintendent, Valley Forge Military Academy.*

The Editor

MEANINGFUL INTERVIEWS WITH BEGINNING TEACHERS



Photo, courtesy of Chicago public schools

RICHARD A. SIGGELKOW
Associate Director, Teacher Placement Bureau
University of Wisconsin

THERE are many suppositions as to what topics are most often discussed during the initial interview between beginning teacher candidates and hiring officials.

Various subjects are reported as normally constituting part of such conferences. However, little investigation has been undertaken which substantiates frequently written advice.

How can we really know how school administrators rate as interviewers until the elements of their talks with beginning teachers are analyzed? Here are four criteria that evolved from recent research:

Does the prospective employer give teaching candidates the opportunity to express themselves adequately and present their own views?

Does he conserve valuable time during the interview by not discussing items with which candidates are probably already familiar?

Does he acquaint candidates with information about typical living conditions and other matters of personal concern to them as future members of his community?

Does he attempt, through any key questions, to gain some insight into the individual's teaching philosophy?

Administrators who can truthfully answer Yes to the foregoing questions are definitely in the minority, according to a content analysis of interviews recently conducted at the University of Wisconsin Teacher Placement Bureau. A questionnaire was constructed which aimed at including all possible areas that might be discussed during initial interviews between hiring officials and beginning teacher candidates.

The questionnaire was administered individually to the members of a sample group of 106 seniors immediately following the interview. Individual conferences were then held by the investigators with each person to verify the areas marked as having been included in the discussion.

COMPOSITION OF SAMPLE

Twenty men and 86 women candidates, representing 22 high school teaching fields, constituted the interviewee sample. They were interviewed by 35 Wisconsin schoolmen, coming from communities that ranged from among the smallest to the largest in population within the state.

Participating administrators included only those who wrote or telephoned at least one day in advance to let the placement bureau know definitely of their intended visit. This limited the number involved, defined the administrative sample group, and eliminated those persons who "drop in" at the bureau on the same day they plan to interview without having notified placement personnel of this intention. It was believed that members of the selected group would give more thought to the questions used and to the conduct of this particular kind of conference.

The participating seniors were not unprepared candidates suddenly pulled out of a class to meet a stranger. Interviewees were informed about the conference at least one day in advance. Having a definite appointment reinforces the applicant's self-esteem and reacts favorably on his general emotional state, dispositioning him to be more receptive and cooperative.

Interviews used in the study were further restricted to include only those involving two persons. There are additional relationships to observe and fine adjustments to make between personalities when more than two persons are present at an interview.

Authorities also stress the importance of conducting interviews in favorable settings. All conferences involving the sample group were held in the same conference room at the placement bureau. This office represented the best physical setting available and added another constant factor to the investigation. The value of quiet, neat and orderly surroundings is apparent.

Privacy not only presents advantages to the job applicant, but also reacts favorably on the interviewer. Every

effort was made to ensure freedom from distractions. No time limit was placed on these conferences. Under such conditions both parties need respond to fewer stimuli and can concentrate more effectively on the business at hand. The interviewee is less self-conscious and not so reluctant to speak of personal matters when there is complete privacy.

STABILIZING FACTOR

The period covered included the months of February through May. Closing the study at this time eliminated certain changes of attitude that may result in June. As the school year ends, schoolmen tend to make selections more hurriedly, and candidates still unplaced naturally reflect a certain anxiety as they approach graduation without employment. Administrators are less likely to try to obtain information they might otherwise seek if the pressure were not so heavy. This time factor was a stabilizing factor.

The most frequently reported topics of the almost 100 different check list items were tabulated and constituted the content which characterized these initial conferences.

The breakdown in Table 1 reflects the combined total number of times hiring officials and beginning teachers brought into the conversation items concerning information about the teaching assignment, the school, the community, and matters of personal interest—the first four general sections of the questionnaire.

The items from the three general areas concerned with the teaching assignment, the school, and the community accounted for more than half of the 20 most frequently discussed topics for all interviews.

It is also obvious that this phase of interview topics is controlled by hiring officials more than three-fourths of the time. Much of the discussion time of each interview is apparently monopolized by the administrators, since the four general areas listed are informational in nature.

The four most popular topics concerned with information about the *teaching assignment* were the specific classes and grades to be taught, extracurricular assignments, size of classes, and the teacher's room facilities within the school building.

The three foremost items about the *school* included total enrollment, condition of the physical plant, and the number of teachers within the system. The section on information about the *community* contained the largest total number of responses for all items. Discussed most often were transportation facilities in and out of town, the location, and the population of the village or city.

Under *matters of personal interest* only one topic—typical living conditions for teachers—was checked sufficiently often to be included among the 20 most discussed items. The candidates also reported that this section was inadequately covered in contrast with other major areas. Schoolmen will do well to investigate closely this reaction by beginning teachers.

In fact, the question about living accommodations would not have been among the most popular topics had it not been the only subject of the entire questionnaire injected into the conversation more frequently by interviewees than by prospective employers. This is one measure of the popularity of this matter as far as these future teachers were concerned.

Table 1—Number of Times Items in First Four General Sections of Questionnaire Were Mentioned in Initial Conferences With Hiring Officials

Information about:	Items introduced by: Interviewer	Interviewee	Totals
Teaching assignment.....	332	117	449
School.....	345	85	430
Community.....	406	112	518
Matters of personal interest.....	111	84	195
	1194	398	1592

Questions about *personal data* and *academic data* were naturally proposed only by the hiring official. Personal data items included among the foremost topics were questions as to the interviewee's engagement or marriage plans and college, as well as high school, extracurricular abilities and activities. Under academic data the interviewers were most concerned about practice teaching experience.

OTHER INFORMATION

Items under *other information* aroused little interest except for two fairly interesting questions posed by the administrators—the size of the community in which the candidate was raised and the beginning teacher's reaction toward life in a town of the size that was represented by the hiring official.

A topic as important as salary is apparently inevitable, since it cropped up almost 100 per cent of the time. In 84 of 106 cases (79.2 per cent) the hiring official introduced this matter. In 18 of the cases (17 per cent) the candidate initiated the salary item. In only four interviews (3.8 per cent) was the question not brought up by either party. Salary negotiations were initiated oftener by the schoolmen from larger cities than by those representing smaller towns.

Table 2 indicates the responses of the 106 interviewees, showing the 25 most discussed items during these conferences. Although the matter of salary negotiations could also be included in this list, it was handled as a separate item.

Contrary to popular belief, certain "expected" subjects did not show up as typical interview content. Rarely were references made to travel experience, per cent of expenses earned while in college, work experiences, the candidate's grade point average (*not* included in the registrant's credentials at the university placement service), and the interviewee's professional ambitions.

Such matters were definitely not part of the reported content. Table 3 reveals how infrequently 13 such selected items occurred.

Interviewees should also be provided with increased opportunities to inquire into presently overlooked areas if this type of meeting is to become even more valuable as a selection device for both participants.

The interviewers stressed such topics as the location and population of

the community. Yet these always were two of the 100 topics which the candidate had either *previously investigated or already knew about* prior to the conference.

At the same time, little was told prospective teachers about such vital subjects as the recreational opportunities and activities of civic interest within the community. Schoolmen may find that increased emphasis must be placed on these areas if new teachers are to be attracted to their school system. Some work may have to be done by local groups to ensure that the teacher is given an opportunity to participate more in local affairs.

The 106 seniors were also asked to underline any topics in the first four areas not discussed during the conference which they would like to have had included in order to gain a clearer picture both of the position and of the community.

TOPICS NOT DISCUSSED

Among these topics were activities in which the community expects the teacher to participate, expectation regarding the use of the teacher's weekend time, personal habits not approved by the community, recreational opportunities available to teachers, and activities of civic interest. These areas will need to be adequately covered by interviewers in the future if they wish to attract promising young teachers to their communities.

Table 4 lists 12 topics not included in the conferences on which candidates most desired information. Also indicated are the total number of times these items were discussed in other interviews.

Administrators should acquaint candidates with information about typical living conditions and other matters of personal concern to them as future members of the community. Schoolmen will also profit by investigating the problem of available housing prior to the interview, especially in these days, when such information may result in a favorable reaction to an offered contract.

Since candidates are interested in such matters as personal habits not approved by the community and activities in which teacher participation is expected, the wise administrator will be a step ahead of his competitor if he openly tackles such areas at the outset. The prospective teacher usually finds that he has nothing to be concerned about, but he is not to

Table 2—The 25 Most Frequently Discussed Items During Initial Conferences With 35 Hiring Officials

Item	Times Reported	Per Cent
Specific classes and grades candidate is to teach[1]	104	98.0
School enrollment[1]	95	89.6
Extraclass or cocurricular assignments[1]	83	78.3
Size of classes candidate is to teach[1]	83	78.3
Population of the community[1]	83	78.3
Condition of physical plant[1]	70	66.0
Location of community[1]	70	66.0
Room facilities (school)[1]	70	66.0
Number of teachers[1]	64	60.4
Typical living accommodations for teachers[3]	64	60.4
Transportation facilities[1]	59	55.7
General educational and cultural level of population[1]	54	50.9
Enrollment trends[1]	50	47.2
Practice teaching experience[2]	46	43.2
Size of community in which candidate was raised[2]	44	41.5
Financial ability of community to support schools[1]	44	41.5
Number of new teachers in school[1]	42	39.6
Dominant nationality groups[1]	40	37.7
Philosophy of the school[1]	40	37.7
Other schools in community[1]	39	36.7
Cost of room and board[1]	39	36.7
Recreational opportunities[1]	36	33.9
Churches in community[1]	35	33.0
Dominant vocational groups[1]	35	33.0
Engagement or marriage plans[2]	34	32.1

[1]Introduced into discussion by both candidate and hiring official, but initiated more frequently by hiring official.
[2]Asked by hiring official only.
[3]Introduced into discussion by both candidate and hiring official, but initiated more frequently by candidate.

Table 3—Selected Items Discussed in Less Than 20% of the 106 Initial Interviews

Subject	Total Questioned	Per Cent
Type of work experiences	20	18.8
Teaching philosophy	15	14.2
Your interest in children	12	11.3
College grade point average	10	9.4
Professional ambitions	8	7.5
Preparation and qualifications which you believe will help you in the teaching profession	8	7.5
Why you want to teach	7	6.6
Honors, college distinctions	6	5.7
How much you enjoy working with people	5	4.7
Per cent of expenses earned while in college	3	2.8
Personal traits which you believe will help you as a teacher	1	0.9
Travel experience	0	....

be blamed for hesitating to ask about certain subjects.

Candidates naturally do not wish to give an impression that they are anxious only to learn how far they can go if they happen to be so unfortunate as to land a job where a number of provincial restrictions are imposed. Nor does the normal person wish to convey the idea that he intends to make a run for the local railway station with suitcase in hand every Friday afternoon the minute the final bell marks the end of the school week.

For that matter, if certain restrictions are in force, the time for everyone to understand them is before the new teacher arrives on the job, not after. There will often be certain areas of information that can be divulged only by the hiring official simply because no one else knows as much about the local situation.

Although hiring officials will, and perhaps should, continue to discuss such topics as school facilities, there may be other matters that would definitely increase the candidate's understanding of the job. Such subjects as a consideration of the philosophy of the school would contribute to this end if included in the conference.

More time could also be devoted to exploring other significant topics if, prior to the interview, the placement service were provided with really comprehensive information about the teaching assignment, the school, and the community. Many minutes were undoubtedly spent discussing certain information that could have been placed in the candidate's hands prior to his meeting with the prospective employer.

Actually, there is not much time to waste. The arithmetic mean for the interviews was 26 minutes. Sixty-five of the 106 cases fell within the 20 to 30 minute range. This is hardly enough time to permit much deviation from a discussion which must provide both parties with enough information so that a wise decision can be reached.

A permanent "Community Credentials" file kept at teacher placement offices would help conserve valuable time for everyone concerned.

As a direct result of this study, the University of Wisconsin Teacher Placement Bureau is currently building up a file for each city and town which includes a map indicating the location of each community as well as other basic data, such as population figures, church facilities, transportation in and out of town, recreational opportunities, and activities of civic interest.

Such data are also being supplemented by news items, school annuals, teachers' handbooks, and any other materials the administrator wishes to provide the bureau.

Table 4—Twelve Items of Information Most Desired by Interviewees but Not Included in Initial Conferences

	Already Reported as Content by Interviewee	*Desired as Content but Not Discussed*	*Total Interviewees Not Interested in Content*
Information of personal interest			
Activities in which community expects teacher to participate	21	49	36
Cost of room and board	39	37	30
Established security provisions	14	35	57
Personal habits not approved by community	9	35	62
Expectation regarding use of teacher's week-end time	19	34	53
Typical living accommodations for teacher*	64*	29	13
Information about the community			
Recreational opportunities	36	35	35
Activities of civic interest	23	31	52
General educational, cultural level of population	54	28	24
Information about the school			
Type of marking system	3	38	65
Philosophy of the school	40	34	32
Information about the assignment			
Available audio-visual equipment	5	31	70

*Introduced into conversation more often by candidate than by hiring official.

INSIGHT INTO COMMUNITY

Candidates have access to these files, which provide considerable insight into each community. At the outset of his conference the registrant now has a better understanding of the teaching situation and is in a better position to bring up questions about other important details that may occur to him.

Finally, schoolmen should be aware that certain presently neglected content might provide considerably more insight into an individual's prospective value than can be gained by the discussion of other topics.

Little effort was apparently made by the interviwers to ascertain a candidate's teaching philosophy, although few would dispute the importance of this item. This may be the case because so much time has to be devoted to other topics.

Although no time limitation was placed on the interview period, questions such as why the candidate chose teaching as his career, why he wants to teach, his interest in children, how much he enjoys working with people, personal traits he believes will help him in the classroom, and his professional ambitions—areas designed to explore to some extent a candidate's teaching philosophy—were just not part of the conferences.

The results of this analysis of interview content represent the beginnings in an exploration of a new research area.

Such investigation must be expanded into determining the extent to which certain areas are discussed, the importance of each segment covered, and a consideration of reasons for faulty communication between participants during interviews.

A. HELEN ANDERSON
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Denver Public Schools

DENVER SCHOOLS MEASURE PUBLIC OPINION

ANSWERING WITH FACTS

SHOULD our public schools accept individual complaints as typical of the attitudes of a community as a whole? Should they dismiss such complaints with a mere "No, it isn't true," without themselves first knowing the facts?

The public schools of Denver experienced an epidemic of criticisms some four years ago. As in other parts of the country, questions raised came from people with varying motives. Many were honest questions about the school program. Others came from publicity seekers, a few from parents who had entertained too imaginative ambitions for children of only average ability. But, as in other communities, the blended voices of these critics, joined with those whose motives were less sincere, created the impression of a community-wide dissatisfaction with the schools.

ANSWERS TO TWO QUESTIONS

Instead of answering these criticisms with unsupported denials, vague generalities, and smooth reassurances, the personnel of the Denver public schools bided its time, fortified by the fact that prior to the outburst of criticisms, it had already begun to establish the machinery to obtain answers to two questions of its own: (1) What do Denver people think of their schools? (2) How well are the pupils in our schools doing?

Before answering their critics, the Denver schools thought that they must have the answer to these two questions, and, if the criticisms had any foundation in fact, it was the moral responsibility of the schools to do something about them.

In 1949, some months prior to the rising crescendo of local criticisms, the board of education approved plans for two comprehensive studies, the first to discover what the people of Denver actually thought about their schools and the second to determine what was the actual quality of the work of the schools in those areas that could be tested.

The entire program was set up on a basis of repetition at three-year intervals. Hence, in 1950, the scientific study of public opinion was concluded at the same time that the results of a status-testing survey of the progress of the pupils in the Denver public schools were available.

Briefly, these two studies showed that the majority of the people had praise for the Denver public schools and that the scholastic achievements of the Denver public school pupils were satisfactory or better in nearly all areas tested, more than satisfactory in some areas, low in a few areas. By the time of graduation from high school the composite score was well above the expected achievement for the pupils involved.

Table 1—Opinions of Parents on Thoughtfulness and Attention Children Receive at School

	Replies per Hundred Parents
Yes, all right	53
No, but not teachers' fault	33
No, partially teachers' fault	13
No opinion	1

Following completion of the 1950 studies, a definite program of action was initiated to improve the scholastic attainments for pupils in those few areas in which they were found to be low. A thorough study was made of the criticisms of the schools in terms of their validity. As was expected, the complaints failed to justify the newspaper space that had been accorded to them.

In accordance with the program adopted in 1949, the opinion study and the status-testing program were repeated in 1953, with results that are significant.

"SCHOOLS DOING GOOD JOB"

"The Denver public schools are doing a good job"—that was the opinion in 1953 of approximately three out of each five of the Denver citizens interviewed in the study. These findings indicated an increase of 10 per cent over the number of persons who in 1950 thought the schools were doing a good job.

The opinion studies of both 1950 and 1953 were conducted by a professional organization outside the schools, using recognized sampling technics. In brief, these technics gave an equal chance of selection for interview to all Denver citizens. Every district of the city was included. In the 1953 survey approximately 1100 citizens were interviewed; of this number only 437 were parents of children who now are enrolled in the Denver schools.

While many of the questions used in the survey had to do with the hotly debated fundamentals, others had to do with the more modern aspects of education. The results of the questionnaire indicated that those interviewed, while concerned about reading, writing and arithmetic, were also interested in the less orthodox elements of the school program and in school problems less obvious than the three R's. For example, the parents interviewed gave praise to such factors as instruction technics, teacher qualifications, buildings and equipment, development of wide interests and knowledge, teacher-child relationships, teacher-parent relationships, personality development, health progress, and, believe it or not, the pupils' enjoyment of school. Evidently parents want attention paid not only to reading, writing and arithmetic but also to both the material and the human elements that contribute to what goes on in a schoolroom.

The chief criticism of the schools, as expressed in the 1953 survey, related to crowded conditions. About 22 per cent of the parents commented on this situation, but fewer than 10 per cent of the parents interviewed criticised such areas as teacher qualifications, grading and promotion. Only 5 per cent criticized the teaching of the fundamentals and fundamental English. This was in contrast to the survey of 1950, when 28 per cent of the parents offered criticism in these areas. However, following the 1950 opinion survey, the schools had studied the results of the status-testing program of the same year and had concentrated for three years on improving certain teaching technics and the content of study materials.

For example, steps were taken to articulate subject matter courses from kindergarten through Grade 12. The first of these studies to be completed was the mathematics guide and the second, an English guide. (At the present time, teacher committees—each of which includes lay representatives from the parent-teacher association—are at work on a K-12 social studies guide.)

Another important step in the improving of instruction was the administrative reorganization that was effected some years ago. Organized for nearly 30 years with an assistant superintendent in charge of elementary education, one in charge of secondary education, and a third for business management, the Denver schools now have instead an assistant superintendent in charge of instruction and one in charge of personnel services, with the third assistant superintendent remaining in charge of business services.

Figure 1—Aspects of the Denver Schools Criticized by Parents

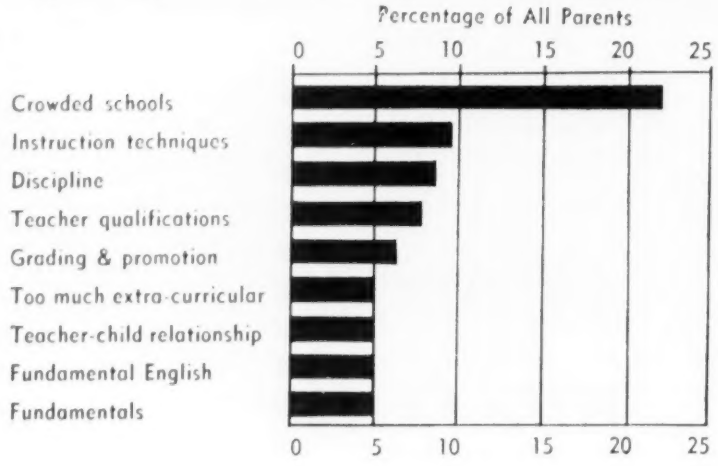
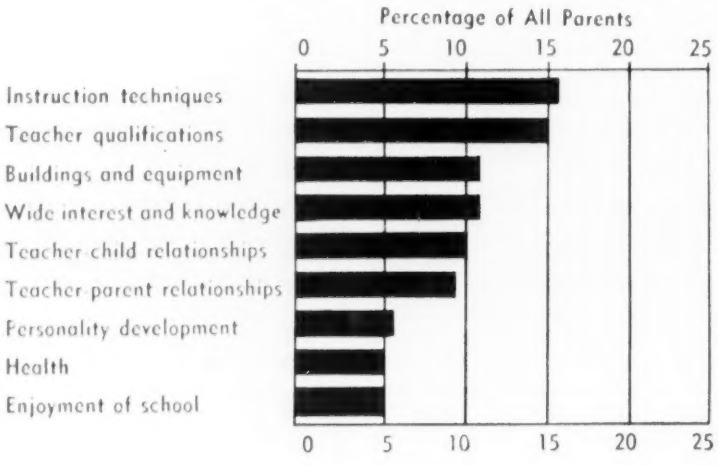


Figure 2—Aspects of the Denver Schools Praised by Parents



Results in the 1953 opinion study were tabulated according to the opinions of both parents and nonparents. Results indicated that a greater percentage of the parents than of the nonparents approved of the schools. Two out of each three parents approved of the school program in contrast to four out of each seven nonparents.

Table 2—Parents' Opinions of School Discipline

	Replies per Hundred Parents
About right	53
A little too easy	28
Much too easy	17
Too hard	0
No opinion	2

This difference in the opinions of parents and nonparents could be interpreted to mean two things. First, it is a foregone conclusion that parents, who are more familiar with the schools than nonparents, would be more likely to know what is really going on in the schools. Second, nonparents, who do not know the schools and who have been conditioned by the unfavorable publicity in national magazines, would be more likely to be affected by such publicity and, as a result, to be critical of the schools. The job here indicated is to improve the technics of informing the nonparent group of the actual work being done in the schools.

Facts from the 1953 status-testing program were available at the same time the results of the opinion study

were published. Briefly, the testing study indicated that Denver school pupils were measuring up to their expected achievements or exceeding them in virtually all subjects in which they were tested. Evidently the work in the schools had improved, in line with the more favorable attitudes shown by the opinion study.

Standards by which the citizens of Denver measured their schools as seen in the 1953 survey included fundamental learning, broad backgrounds of learning, and well rounded personal development. Eighty-five per cent of those interviewed, including both parents and nonparents, stressed the importance of fundamental learnings; 50 per cent stressed well rounded personal development, and 30 per cent listed broad backgrounds of learning. Broken down into special elements, the list of desirable learnings included self-expression, ability to say what is meant, manner of talking, ability to write letters, and the use of grammar, spelling, punctuation and vocabulary.

The findings of these surveys of 1950 and 1953 provide an interesting example of change in the opinions of Denver people. Perhaps it is fair to conclude that the forehanded way in which the administration sought to find answers to its questions tempered the more belligerent critics' attitude.

Table 3—Opinions on Elementary School Homework Policy

Replies per Hundred	*Parents*	*Non-parents*
Agree with the policy not to assign homework	42	35
Homework should be assigned	58	64
No opinion	0	1

Of interest, equally, with the results of the opinion survey are the technics that have been used, particularly in the field of status-testing programs, to acquaint parents and teachers with the results. In every school in the city meetings have been held for discussion of the program, care always being taken not to compare the school concerned with any other school. Additional precautions were taken not to bring individual classrooms into direct comparison with each other.

Discussion groups have been formed to bring about still further improvements in the school work of boys and girls in the Denver public schools.

Still other studies were outlined in the 1949 program, and are being conducted on a three-year interval basis. One is a study of the college records of our graduates. The first of these, published in 1951, showed Denver graduates are average or above average students in every college attended. This study will be repeated during the next school year.

An additional study now being prepared for publication gives the opinions of business and industry with regard to the success of those high school graduates who did not go to college.

On the basis, then, of actual knowledge of what the community thinks and what our boys and girls actually achieve, plus a continuing program of improving instruction, the Denver public schools find themselves in the position of providing correct answers to the current criticisms of public education as far as Denver is concerned. On the basis of accurate information they have been able to improve school work in those few situations where improvement was indicated.

Table 4—Parental Opinion of High School Homework *

	Replies per Hundred Parents
Too large	21
About right	64
Too small	10
No opinion	5

*Nonparent opinion is not given in this table because 41 per cent of the nonparent group gave no opinion.

Throughout these programs, the administration of the schools has sought the participation of parent advisory groups that have worked hand in hand not only with school authorities but also with teacher groups within individual schools, all to the end of improving instruction and the ultimate product of the schools.

Such an atmosphere, only occasionally affected by the current hysteria, is one in which citizens, teachers, administrators, and the board of education can work with that serenity and deliberation without which progress is impossible.

Results of the surveys have been published in two pamphlets. "The Denver Public Schools Look at Themselves" contains highlights from the 1953 evaluation study of the achievements of pupils. "Denver Looks at Its Schools" covers highlights from the opinion studies that were conducted in the city in 1953.

Figure 3—Relative Frequency of Mention of Three Curriculum Areas That Should Be Stressed

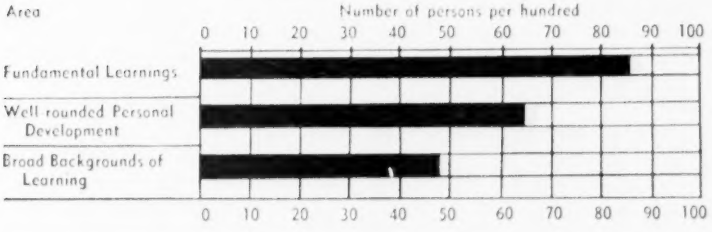
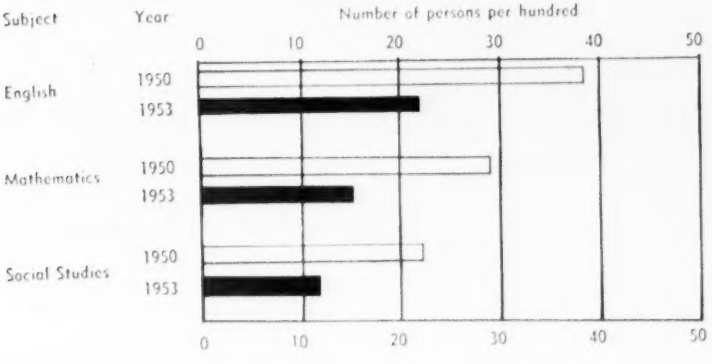


Figure 4—Numbers of Parents Believing Three Academic Subjects Are Neglected, 1950 and 1953



Special programs for

The Gifted and the Educationally Retarded

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JAMES M. DUNLAP
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SPECIAL programs are provided in the schools at University City, Mo., for two groups of children whose needs are often neglected—the gifted and the educationally retarded. For the gifted an enrichment program has been provided; the educationally retarded are given such tutoring as they may need.

Many gifted children who test in ability in the top 1 per cent or higher of their classes do not have enough really hard work to do in school to stimulate their best efforts. It is for these children that the University City schools have established an enrichment program. At present, 275 pupils in Grades 2 through 6 are enrolled in 30 different classes. All the time of two full-time special teachers and half the time of a third teacher is spent directing these classes in the eight elementary schools of the city.

Pupils meet with their enrichment teacher in groups of eight or 10 for periods of 40 or 50 minutes twice each week during school time. They study, for the most part, topics of their own choosing, selected, however, with the help of the teacher. These study areas include language, social studies, and science. They are given such titles as "Great Composers," "Literature," "St. Louis Industry," "Nature Study," "Sky Pictures," "The Science of Weather Prediction."

In these study units, reading, discussions and written and oral reports are supplemented by trips to make first-hand observations, by the construction of models or equipment, and by preparation of charts, graphs and maps which the children need to illustrate their projects. The original plan was to study two or three different units each year. The pupils, however, in almost every instance have insisted on continuing the initial topic, an indication not only of the children's ability to concentrate on the subject for a long time but also of their interest in the program.

In addition to these activities, parts of some periods are devoted to the discussion of current happenings, periodicals, newspapers and maps being used. At other times a series of questions promotes stimulating discussion. Provision is made for creative writing, for the study of human relations, and for the examination of popular magazines, games, puzzles and the like. Typing has been introduced this year, not



Children who are educationally retarded because of prolonged absence from school, frequent change in schools, spotty academic background, unfavorable home influences or emotional or social problems are enrolled in the tutoring program. Interesting material at the child's own level helps him learn the basic reading skills.

as a skill but as an additional means of communicating.

Each year the eight groups of sixth grade enrichment pupils, in addition to their usual studies, contribute to the school camp program planned for all sixth grade children for one week each spring. Their contributions have included the construction of a weather station, an electrically controlled nature display board, a soil erosion display, aluminum signs identifying plants and trees of the camp area, and a series of provocative questions to use on nature hikes.

The variety and interest introduced into the program by imaginative teachers is surprising, particularly in view of the limited amount of time devoted to enrichment. Forty or 50 minute periods twice a week add up to only two or two and one-half weeks out of the entire school year.

The program seems to meet the needs of a large majority of the children. Only 4 or 5 per cent of them fail to benefit appreciably. The spontaneous comments of the children themselves and also of their principals, teachers and parents attest to their interest and enthusiasm. Furthermore, statistical evidence indicates that a large proportion of gifted children are motivated by enriched activities to make better use of their abilities. This is reflected in junior high school; former enrichment pupils receive better school marks than do members of an equally capable control group who have not had enriched activities in the elementary grades.

On the other hand, some children are unable to get the most out of school work or to keep pace with their classmates even though they have adequate ability. Prolonged absence from school, frequent change in schools, spotty academic background, unfavorable home influences, emotional or social problems, and similar factors often interfere with learning. For children who have the capacity but are unable to make use of it effectively, the University City schools provide a tutoring program.





ABOVE: Special study units are planned for gifted children in the University City schools. The symbols on the blackboard (at right) are those used to describe wind velocity. BELOW: With milk cartons, paper cups, and coat hangers, several gifted youngsters constructed a weather station.

TUTORING PROGRAM

Tutoring is available to pupils in Grades 2 through 6 in three major subjects—reading, spelling and arithmetic. The largest group of pupils, approximately 90 per cent, requires remedial reading. The pupils are taken out of the regular classroom to meet with a special teacher in groups of four or five, generally two half-hour periods a week. The length of tutoring depends upon pupil progress and may continue from a few weeks to a year or more. At the present time approximately 200 pupils in the eight city elementary schools are enrolled in the tutoring program under the guidance of two teachers, plus one teacher who spends half her time on this.

Thirty-three per cent of the pupils in the tutoring program have entered the school system in the last two years. Fifty-nine per cent have had at least one year of schooling in some district other than University City.

A study of the reading achievement of pupils receiving tutoring who were tested in October, January and May showed significant results. Previous to tutoring these pupils were one full year behind their grade level. In the first three months of tutoring they made an average gain of five months in reading achievement. In the last four months of tutoring the average gain was eight months. Expressed in another way, the gain for the entire period of seven months was one year three months in reading achievement. Sixty-four per cent of this gain occurred during the last four months. This fact seems to suggest that the value derived from the tutoring program is greater when the period of continuous tutoring is extended.

When provision is made for these educationally retarded children outside the regular classroom, the classroom teacher has more time to work with other pupils who need individual attention and help.







A plan based upon a survey of all districts having 30,000 or more pupil enrollment

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Employment policies and

Salary Schedules for School

IN RECENT years much has been written and much has been done to increase the rewards and the professional status of *teachers*. Much is still being done. Undoubtedly this was the place to begin, but one wonders at the relative lack of attention directed toward policies for school *administrators*. They select the teachers, direct their work, and plan the curriculum, and so have a greater responsibility for the quality of learning that goes on in the schools than does any other class of persons. Further, they are expected to furnish the leadership which will result not only in efficient school operation but also in continuing improvement of every aspect of the educational plant and program.

In view of the importance of the administrator's rôle, the question arises: What policies and practices are in use to ensure that our schools are obtaining persons who can provide the leadership needed? In an attempt to answer this question, I surveyed salary schedules and employment policies for school administrators in all of the nation's school districts of 30,000 or more pupil population. Information was received from 92 per cent of these districts. From an analysis of the returns, certain conclusions and recommendations were derived.

Importance of definite employment policies. Persons who administer our schools are, just as much as teachers, looking for conditions which offer a good salary and opportunities for advancement in both salary and scale of responsibility. Of even greater importance, they need to feel that basic security which encourages the exercise of initiative and individual judgment in their work. Good school administration therefore depends on the existence of certain conditions, which in turn depend on the adoption of clear-cut and definite policies by the board of education.

First of all, a proper division of responsibilities between the board and those who are assigned to execute its policies must be defined. On this foundation an organizational plan should be erected to guide school personnel in performing assigned functions. The various assigned functions should be reflected in a rational scheme of personnel policy, the core of which is a definite salary schedule for all personnel in the system. Finally, these policies, plans and schedules should be clearly stated and put into written form so that all concerned may have access to them.

ADVANTAGES OF SALARY SCHEDULES

Definite, written policies and procedures covering employment, assignment and salary can do much to induce persons of high ability to enter the field of school administration and to improve their leadership qualities while there. Such policies also help members of boards of education select personnel and make personnel decisions on a rational basis. For instance, a definite salary schedule as described in the recommendations drawn from the study eliminates uncertainty on the part of administrative staff members as to what the district offers as a beginning salary for a given position, what steps upward are possible, and what performance is required for advancement. At

Adapted from Principles of Administrators Salary Schedules, unpublished doctoral dissertation by Dr. Winward, University of Southern California, 1951. Condensed version published as Research Monograph No. 7 by the California Teachers Association, Southern Section, Los Angeles.

Administrators

Recommended Ratio Salaries for Various Positions in Districts With More Than 30,000 Population

Position and Level of Responsibility	Districts: Group I 30,000-99,999	Group II 100,000-499,999	Group III Over 500,000
1. Superintendent	2.00-2.40	2.80-3.20	3.75-4.50
2. Assistant superintendent, associate superintendent, deputy superintendent, or business manager	1.40-2.00	2.00-2.50	2.25-2.75
3. General directors, director of budget or administrative assistants	1.30-1.75	1.35-1.80	1.80-2.40
4. High school principal, junior high school principal, elementary principal, or general and special supervisors	1.20-1.60	1.25-1.65	1.30-1.75
5. Assistant principals, elementary and senior high school	1.15-1.25	1.20-1.30	1.25-1.45
6. Teachers	1.00	1.00	1.00

the same time, boards of education are relieved of having to bargain individually in respect to the higher positions, and the possibility of making capricious or second-best choices is minimized. Another advantage for boards of education is that they can plan budgets more accurately and can anticipate financial needs of the school system on a longer term basis.

How definite salary schedules may be developed. The study revealed that most of the school districts reporting had some policies and procedures relating to salary and employment conditions, although some districts had none at all. Even where policies existed, however, they were usually inadequate. In many cases the policies were not clearly stated or put into written form so that they were available to all concerned. Rarely was the position of chief administrative officer of the system included in the schedule.

METHODS OF DEVISING SCHEDULES

The methods of devising administrative salary schedules varied. In most of the districts the governing board was responsible, although there were some instances of the chief administrative officer's establishing the schedule for all except his own position, and in still other instances a local governmental agency, such as a city council or county board of supervisors, set salaries.

The method judged most successful, which was utilized by 60 per cent of the reporting districts, was the cooperative development of the salary schedule by a group of persons, including board of education members, the school superintendent, members of his administrative staff, and teacher representatives. Sometimes salary experts from governmental agencies or private business and other lay citizens were invited to work with the members of this committee.

Such action tends to bring all salary problems into the open and to result in public knowledge of the salary schedule. Findings of the study showed that administrators were more satisfied with this method of developing the schedule than with any other. They felt that there was no logical reason to treat administrators' salaries as confidential information, as some districts do, or in any manner different from the way in which teachers' salaries are treated. Districts should be willing to pay their administrators well and to have this fact known. The policy of concealing salary amounts and entering into secret contracts with administrative personnel was considered a poor one—one which resulted in distrust and lack of confidence in the board and its executives on the part of teachers and other school personnel. Such a result of course tends to create a cleavage between the leadership group and those who are expected to cooperate with this group in improving the learning situation for boys and girls.

A closely related recommendation was that teachers' and administrators' salary schedules should be developed simultaneously, either at the time that a district is newly formed or whenever periodic review and readjustment of personnel and salary policies occur. Some reasons for this recommendation have already been mentioned: the common need of both groups for assurance of economic security and the need to include all items in the planning of budgets and school financing.

SCHEDULES FOR ADMINISTRATORS

Although teachers' and administrators' salary schedules should be developed in relation to each other and at the same time, there are certain differences between the functions of the two groups that make it preferable to keep the schedules separate.

Type of schedule recommended for administrators. A schedule based on experience and training is recommended for administrators. For each position title there should be four classes, and within each class four or five annual steps. Placement in a class should be made on the individual's educational qualifications, according to these definitions: (1) the bachelor's

degree plus 30 units, (2) the master's degree plus 24 units, (3) the master's degree plus 48 units, and (4) the doctor's degree. The differential between classes favored by most districts reporting was $200. Annual salary increases for experience should amount to one-fourth or one-fifth of the difference between the starting salary and the maximum for the class. Some overlapping of later steps in one class and early steps in the next higher class will therefore occur, but this is not regarded as a fault since this type of schedule rewards all forms of training and experience as well as course work and degree holding.

NO EXCEPTIONS

The rules related to this schedule require that step status be maintained. There should be no exceptions to assigning each individual to his proper place on the schedule. Once a person is placed, the rules of the schedule should govern class transfer for educational improvement and step progression for experience in the position. If professional growth requirements are not met, either before or after the individual has reached the maximum step in his assigned class, then retrogression on the schedule should take place. All salary changes should be made at a stipulated time on an annual basis. Persons not qualifying at that time should wait until the next salary change period.

Professional growth and educational requirements. Every professional person should keep informed and up to date in his field. School administrators as well as teachers should take courses and fulfill professional growth requirements, and both these conditions should be spelled out in the separate salary schedules. The study indicates that from two to four units of university work in a period of from two to four years are appropriate for school administrators. Evidence of completing such work should be required both for step progression and for maintenance of position at the maximum step. A flexible handling of individual cases was urged in this area.

Some of the districts reporting have adopted the practice of allowing equivalents in lieu of university training as a way of meeting educational improvement requirements. These equivalents include travel, literary contributions, research studies, attendance at educational conferences, community service, and similar items. Because such items are hard to define and evaluate, any program including equivalents must be carefully controlled. It is felt that a district would do better to place these equivalent experiences in a professional growth program in which all certificated personnel, not just administrators, is required to participate. Travel and leaves for further study should be encouraged for all individuals as means for professional and educational growth. With the exception of absence due to military service, for which annual increments should be granted, equivalents as a basis for administrators' salary advancement seem to be little justified.

Another practice which the evidence shows can lead to confusion is that of using merit ratings for advancement on the schedule. No satisfactory methods of rating were found in the study; those which had been critically constructed so as to take into account the human element in judgment resolved themselves into two ratings only: satisfactory or unsatisfactory. An unsatisfactory administrator, of course, should not be retained at all. Merit ratings are therefore recommended in selecting individuals for administrative positions, or in deciding whether to eliminate or retain them, and not for measuring whether to advance them.

Establishing salary amounts. Assuming that the district operates with a single salary schedule for teachers, the maximum teacher salary should be used as a basis for the amounts to be paid to the administrators. The maximum rather than the average or minimum teacher salary is recommended, although the mean or median maximum of actual salaries paid would not be an objectionable base. The administrators' salary schedule can then be constructed in ratio to the selected base.

In determining the ratio scale, which in turn will determine the amounts to be paid in the various administrative positions, it is sometimes helpful for a district to investigate what other comparable districts are paying. However, each district should develop its own schedule, keeping in the forefront its own problems, its own tax rate, and its own educational needs, rather than limiting itself to or merely duplicating some other school district's salary schedule.

LEVELS OF PAY

The analysis of several hundred administrators' salary schedules showed that levels of administrative pay within a district ranged from two to 20 levels. The superintendents of these districts were then asked to group their administrative staff positions in a hierarchy according to the level of responsibility of the position without regard to salary paid. More than one position or salary level could and often did receive the same responsibility ranking in these returns. A summary of these data conveniently groups all administrative positions in a district, including the largest districts, into five or six responsibility levels.

It was further determined from these data that the salaries of principals and other administrators *within a district* should not automatically be arrived at by size of the school. This is a general recommendation, since in extremely large or extremely small attendance units, or in cases of wide variation in number of teachers with credentials supervised, some salary differential will probably be necessary. However, professional service is expected from all administrators, regardless of the size of the unit or operation to which they are assigned, and adding more salary to the position does not improve the physical possibilities of doing a better job. Increased work load should be adjusted by the assigning of additional help, either clerical or professional. The principle to be

Officially adopted employment policies for the superintendent, including salary raises, assure that administrative decisions will be made on the basis of what is best for the school system.

adhered to is that positions in the same responsibility level should receive equal pay, and size of assignment as a factor in arriving at salary amounts should be minimized.

In contrast to the foregoing recommendation, it was found that *size of the district* has a definite bearing upon the amount of salary paid. Ordinarily, the larger the district, the more the salary paid for comparable positions. This seems to be justified in the sense that larger districts as a rule have more ability to pay adequate salaries, and in so doing they set standards which smaller districts should attempt to match according to their ability. In the study, districts were classified as to size in three groupings: Group I, from 30,000 to 99,999 pupil population; Group II, from 100,000 to 499,999, and Group III, more than 500,000.

Schedule governs increments for educational improvement and for increase in experience. Each district should determine its own policies rather than imitate or compete with neighbors.

SUGGESTED RATIO SCHEME

The following suggested ratio scheme for determining salary amounts of administrators takes into account the responsibility level into which various positions can be grouped and the size of the district. It assumes that all administrators are qualified and have the proper credentials for their assignment.

Ratio scheme for determining salary amounts. In the first responsibility level there is one position: the superintendent of the district. In Group I districts, the ratio of the superintendent's salary to the maximum teachers' salary should be in the range from 2.00 to 2.40; in Group II districts, from 2.80 to 3.20, and in Group III districts, from 3.75 to 4.50.

In the second responsibiilty level should be the assistant, associate and deputy superintendents, together with the business manager. (In many districts the business manager is an assistant superintendent.) Recommended ratios for Group I districts are from 1.40 to 2.00; for Group II districts, from 2.00 to 2.50; for Group III districts, from 2.25 to 2.75.

The third responsibility level should include the general directors, such as the director of the budget and the administrative assistant to the superintendent. Recommended ratios for Group I districts are from 1.30 to 1.75; for Group II districts, from 1.35 to 1.80; for Group III districts, from 1.80 to 2.40.

The fourth responsibility level positions should be the high school principal, junior high school principal, elementary school principal, general supervisors, and special supervisors. (Districts which had both general and special supervisors usually placed the special supervisors in the fifth responsibility level.) The ratio salaries recommended for this group are: in Group I districts, from 1.20 to 1.60; in Group II districts, from 1.25 to 1.64; and in Group III districts, from 1.30 to 1.75.

The assistant principals on both the elementary and secondary levels should be in the fifth responsibility level with recommended salary ratios as follows: in Group I districts, from 1.15 to 1.25; in Group II, from 1.20 to 1.30, and in Group III, from 1.25 to 1.45.

The sixth responsibility level includes the elementary, junior high, and high school teachers, and their salaries are used to determine the base, or ratio of 1.00, from which administrators' salaries are calculated.

INDIVIDUAL NEGOTIATIONS

Of all six responsibility levels, that which includes the district superintendent is the one which most often does not conform to a definite salary schedule. Eighty-five per cent of the school districts reporting fixed the superintendent's salary through the process of individual negotiations. They gave no indication that they would soon replace this with some other method. It is to be noted, however, that some districts did report having the superintendent on a definite salary schedule along with other administrative personnel.

It is therefore recommended that the board of education, with the help of competent school personnel and representative citizens, decide upon the salary to be paid a superintendent. Inasmuch as the superintendent carries the greatest responsibility in the school district, he should be well paid. His salary should be based on business and professional salaries of the community, as well as on the kind of ratio relationship to teachers' salaries recommended here. The board then should go about finding the best qualified person who is interested in the position at the stipulated salary. Once selected, the superintendent should be given a term contract long enough for him to put his educational program into effect. If, at the end of the contract, the district is satisfied and wishes to retain him, it is at liberty to do so. If it wishes to change superintendents, that is the time to do it.

School board members the key. It seems reasonable to assume that better qualified administrators will be attracted to a school system which operates with well worked out employment policies, including a definite salary schedule. Such policies also create sufficient guarantee of continued employment that administrative decisions will be made on the basis of what is best for the school system rather than what might be conducive to reemployment the following year.

Since a salary schedule provides for step progression and class transfer, incentive is created for persons to achieve professional improvement to qualify for advancement within the system. Turnover of personnel should be reduced, and continuity of program should be assured. Increased efficiency of operation may be expected, and improved interpersonal relations throughout the system should result.

FEELINGS OF SECURITY

This second effect directly influences the conduct and effectiveness of teachers in the classroom. Their own feelings of security will be enhanced when they are interacting with school leaders who are basing their decisions on long-term goals and who feel free because of their own status security to share leadership responsibiilty with the members of the teaching corps.



Are Our Elementary Schools Too Large?

Is there an optimum building size as well as an optimum classroom size for elementary school children?

ROBERT WILLIAM MacVITTIE

Professor of Elementary School Administration and Principal of Campus School
State University of New York College for Teachers, Buffalo

MUCH has been written about minimum classroom size, as well as about optimum classroom membership. Some states go so far as to have standards which indicate how many square feet or cubic feet should be allowed per child for each classroom. Among the standards there is no statement in regard to the optimum enrollment for elementary schools. Must we not give attention to this matter of pupil numbers?

If there are an optimum classroom size and an optimum classroom enrollment, then there may be an optimum number of pupils per elementary school. We owe it to our children to investigate this matter. Certainly this is an unexplored field.

I, for one, feel that our large school plants are encouraging large school enrollments which can be detrimental to the development of young children. Have you ever considered what an elementary school plant of 1000 or 2000 pupils is doing to those pupils? Imagine the large numbers of little folk living and growing in such huge plants! Large group membership is not of positive importance in the growth of young children, but it can have a negative effect upon their development.

The Child and the Group. Many social processes are responsible for determining a child's behavior and shaping a child's personality. The social processes are influenced by group relationships, relationships which are formed at the beginning of a child's life and continue. The social interaction of groups of children is constantly taking place. They give to each other all the manifold experiences of life through conversation, play and many other activities. The child's group is important in his social development, whether it is in the controlled environment of the school or in the less controlled environment of the neighborhood.

Group contacts during the child's life influence the child in direct proportion to the closeness or intimacy of the contacts. Thus, we can expect the family to exert more influence upon a child than the state. The classroom can be expected to exert more influence than the school as a whole. Classroom groups are thus quite important in the life of a child, since small group membership should permit satisfying experiences. Especially is this true if the transition from membership in small groups to membership in large groups is to be made satisfactorily or is to be made at all.

The School and Groups. Schools have made attempts to provide opportunities for small group experiences through the maintenance of small classes. However, people vary in their opinions as to the influence that the school, as a whole collection of classrooms and pupils, can exert upon the shaping of a child's personality. A large unit, such as a school, does not allow social processes to assist in proper interaction of pupils with each other, as members of the large group.

I feel that by reducing plant size and thus limiting school enrollments, we can assist our elementary schools to provide opportunities for more beneficial social interaction. It is a big step from the home to the school, from family surroundings to the unfamiliar large group membership which comes with school enrollment. Children are able to adjust to this change because their groups are dynamic, especially during the early years. The groups change with the activity. Lasting friendships and stronger group ties and group influences come later with maturity. Children must have happy and successful face-to-face contacts, as well as satisfactory membership in small groups before they can handle the complexities of larger group membership in schools of large enrollments. Groups of too large a size for a particular period of a child's developmental stage can be detrimental to his development.

Large Plants and the Child. The transition from the home to the school can be more easily made when the school plant is simply designed and not monumental. The school building should not contrast more sharply than necessary with the home. It should not be so large that the child is confused. The child should not be spiritually dwarfed by a building's overawing dignity and austere formality. We should beware of the building whose proportions overpower the child and make the supervision and guidance of children difficult.

Most of the physical aspects of school buildings have received attention. Lighting, heating, ventilating, seating and other areas of school plant

Small neighborhood schools, such as this, help small children to make a satisfactory transition from the family to the school group.



Photo courtesy of public schools, Dearborn, Mich.

makeup have been studied to aid in the improvement of the elementary school environment. Auxiliary services, such as lunch programs and health programs, indicate an awareness of what should be included in a modern school program. Only recently has there been any question raised as to the real psychological impact of the school environment upon children. Noticeably lacking, however, is any mention of suggested physical plant size and possible enrollments for elementary schools. We have not yet attempted to measure the physical effects of large elementary school plants and large enrollments upon young children. This will be a tremendous task, yet it appears to me that it must be undertaken.

The school plant's purpose is to provide the physical facilities for the educational program. It is far more than a shelter from the weather. It is an educational tool. A school plant by its very architecture and design teaches children to be afraid of school or to like school. It can teach children to be neat, clean and healthy, or it may have the opposite effect. The building can restrict or stimulate a good elementary school program. School plants are built for more than just today. Should any elementary school plant have a larger capacity than from 300 to 400 pupils? Or contain more than 12 or 14 rooms?

Large numbers of elementary school pupils who are housed in large rambling or multistoried buildings are likely to lose their self-identity as individuals. Large numbers coming in contact with one another tend to be overstimulating. Large periods of time are used up in the mechanics of entering and leaving the large buildings and the classrooms which are spread out. Children who are transported great distances waste much valuable time en route. Full school programs with large numbers of pupils overtax most auxiliary services and facilities. The individual is often limited in his opportunities to participate in rhythm and chorus work and many other parts of the school program. Only so many children can eat lunch in a lunchroom at one time. Many assembly programs are put on more than once to accommodate all. Health programs are often curtailed because too many must be included in the program in too short a time. Attendance areas are too large to permit neighborliness.

ADDS TO CONFUSION

Large buildings require the movement of pupils and materials in horizontal and vertical directions within a building. This does not increase operational efficiency, but it does add to the confusion for children. It has been the experience of those who have worked in large elementary school buildings that young children seldom know much about the building until they have been housed in it for a few years. Large groups do not help children to have personal contact with each other outside of their classroom.

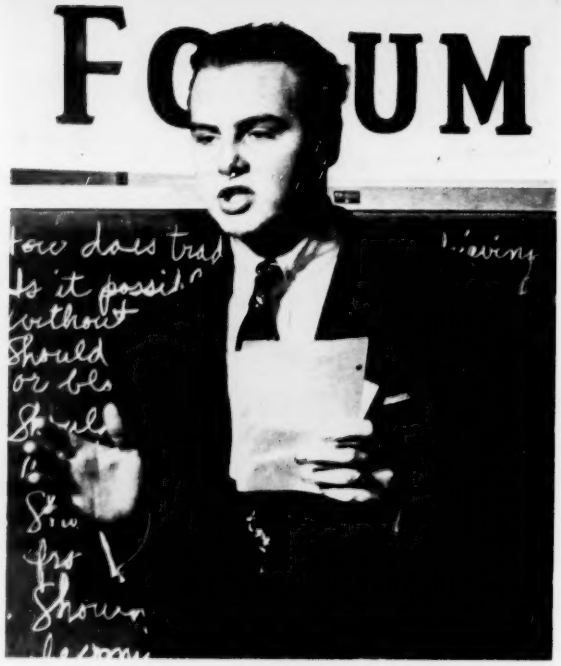
We are fortunate that our classroom units are somewhat self-limiting in terms of enrollments. We are also fortunate that it is possible to have excellent teachers who are able to guide our children through the maze of experiences which are conducive to their growth and development. However, small classes and close personal contacts within the classroom are negated by large school plants, large school enrollments, large assemblies of hundreds of children, noisy lunchrooms, and bedlam-like recess periods. These things cause a child to feel like one among many individuals rather than like a member of the school group.

Can we fully appreciate the effects of too many contacts upon the child who is young, the child who is insecure and the child who needs understanding and gentle (or firm) and available guidance? What kind of an educational job can be done if the philosophy of small class size is offset by an utter disregard for size of school plant and school building enrollment?

It is time that we think more seriously about the potential and real influence upon learning that is exerted by the small school plant and the small school enrollment. Hesitate before you add to any existing buildings. Educate for small school plants and enrollments which are consistent with our small class size theory. Act upon a policy which will take a stand to hold the line on class and elementary school size. The small neighborhood primary school unit and the decentralized primary unit in series may be our answer. The popularity of this type of construction may be a sign that we are on the road to small elementary schools for small children in small numbers.

FORUM

School rivalry gives way to group thinking when suburban youths explore problems of marriage, work, education, citizenship and world affairs



A plea for youths to take leadership rôles in today's world is being voiced by a student recorder at forum.

ANN BRUNNER
Staff Reporter, Daily Tribune
Royal Oak, Mich.

Newspaper sponsored forum brings

Answers From Teen-Agers

A SOUNDING board for teen-age thinking was provided by a newspaper sponsored youth forum held this spring for suburban high school students.

The *Daily Tribune* of Royal Oak, Mich., invited 200 teen-agers to a series of conferences on "Youth Looks at His Nation and the World, at His Community, and at Himself."

A bad press for the nation's teen-agers because of the many "exposés" brings the question: Are we judging all youths by the actions of a few?

An editorial at the opening of the forum expressed our view:

"The *Tribune* believes that today's youths—its soon-to-be young men and women — have all the potential for good citizenship that their parents had and that their interest in their community and times, and where they will fit in, is both deep and sincere."

In this framework, students from eight public and three Catholic high schools of South Oakland County sat down together. There were three workshop sessions, in which they heard and questioned adult experts in the fields

Speakers undergo thorough questioning by student participants in the forum for youth.







Right: A Catholic family counselor listens attentively to students' views on the problems in marriage. Lower right: Three forum participants: one states her case; another busily takes notes; the third awaits her turn to make a point.

of international affairs, community affairs, and human relations.

They listened, then launched out on their own. They threshed out specific issues and found tentative answers through these group discussions of various problems.

Students who usually met in an atmosphere of interschool rivalry were pooling their ideas. They represented Berkley High School, Berkley; Clawson High School, Clawson; Lincoln and St. James high schools, Ferndale; Hazel Park High School, Hazel Park; Royal Oak, St. Mary's and Shrine of the Little Flower high schools, all of Royal Oak; Madison High School, Royal Oak Township; Southfield Consolidated High School, Southfield Township, and Troy Consolidated High School, Troy Township.

We believe the students proved our point. They reassured the adults of the community with their grasp of problems. No "delinquent" thinking here. They reassured themselves with additional self-reliance gained from exchange of ideas with other young school leaders.

Results of the forum still show in the high school classrooms, according to student participants' own evaluation.

Reports of the conference to classes and school assemblies "made everyone feel that he had been there," said one student, describing the spread of ideas by the conference goers.

Interest in special questions raised in the forum sparks projects in many classes, said other students. For instance, a study of world atmospheric conditions grew from discussion of a single point: the community's inadequate drains, which produce flooded basements during rainy seasons.

"We found we had more confidence in our own ideas after hearing what students from other schools had to say," explained another.

This new confidence is reflected in classwork, reports one teacher. "Some of our participating students were people who had good ideas but frequently didn't express them. Now they take more active leadership in their classes."

A teacher and student representative from each school served on an organizational committee to help plan the forum. These teachers managed the selection of the student teams. Some students volunteered, while at other schools they were selected by vote of faculty members, sometimes with student council help. Choices were made on the basis of the students' interest, scholastic record, and ability to profit from such an experience as the forum.

Selecting speakers and planning the program were handled by the *Tribune* school reporter, with assistance from local educators. Students acted as registrars and hosts. A different social studies teacher was asked to be chairman of each conference, opening at 1 p.m. Roughly, an hour was planned for speakers' talks, followed by half an hour of student group discussion, during which time speakers circulated among groups. A brief summary period was followed by the serving of refreshments.

A pilot poll of students prior to the conference indicated the young people's main concerns in each of three areas: international, community and personal affairs. These were forwarded to the adult consultants.

Preparation for the forum varied from school to school. One group of students went to the extent of acquir-

ing lengthy materials from the U.S. government and interviewing county and community officials. (In retrospect, the evaluation committee thought there is a happy "medium" in preparation. Too much of it is likely to discourage flexible interchange of ideas, too little is likely to leave students "cold" in certain discussion areas.)

Speakers selected had to rate on their ability to work with young people as well as on their experience in a given field. None was a national figure, and all came from the Detroit metropolitan area. (Students agreed, in evaluation, that "big name" speakers might have made them feel less free to express their own ideas.)

The Detroit Canadian vice consul, a Detroit university professor, and the world trade manager of the Detroit Board of Commerce opened the first conference on international affairs.

Their talks were rationed to 20 minutes each. Then students pinned them down to specific issues with their questions. Discussion groups followed, with each group containing a representative from each of the 11 schools.

Strangeness vanished as student discussion chairmen called for introductions and got the sessions in motion. Each group took up a specific question that arose as an outcome of the talks and questions following.

Student recorders gave brief résumés of the groups' conclusions or statements of the issues. Discussion—and in some cases argument—on such topics as the H-bomb and Senator McCarthy continued unabated as the session adjourned three hours after it opened, over refreshments in the *Tribune* auditorium.

Students narrowed their sights to their own community in the second workshop, which followed a week after the first. They heard from a local government official, a county administrator, and a regionally-minded Detroit common councilman.

Their own immediate futures became the concern at the third and final conference. They looked ahead to the day when draft, marriage, a job or college would be their lot. Assisting them were a Catholic marriage counselor, a veteran high school counselor, and an elementary school principal.

ON INTERNATIONAL AFFAIRS

The students are suburban dwellers, on the edge of large, industrial Detroit. They are Midwesterners, where isolationist voices are strong. Yet only 12 miles from their homes is the Detroit River, a water avenue for ships that trade the world over. What are their attitudes on international affairs?

The U.S. must keep strong defenses and strong allies, if it is to avoid war. But these allies should get their major help through technical assistance, not dollars. "Shifty" allies with strong Communist parties should not be spurned but rather "educated" through larger teacher and student exchange programs. The U.S. should conduct no trade with Red China but must not stop other nations, whose economic life or death may be at stake. World trade can be a lever to promote peace, and this is an argument for lowering trade barriers.

The young people were somewhat abashed at their seemingly smaller knowledge about their own community. Students in the second workshop concluded "we must educate ourselves as well as our parents" to civic problems and voter responsibility.

Independent thinkers, members of the group went straight down the line against a view on government reform suggested by one of the speakers.

ON PERSONAL PROBLEMS

In the third conference students were seldom unanimous in attempting to answer their own personal problems. They refused to condemn their own age group when considering whether youths of today pay enough attention to moral standards. But they admit supplanting the buggy with the hot rod in itself "makes the temptations and opportunities to be immoral greater today."

High schools don't and can't possibly do the entire job of maturing students emotionally and socially, they feel. They believe parents and schools should give teen-agers more responsibility for "running things."

Mandatory R.O.T.C. in high school as preparation for military life is out, as far as they are concerned. They thought the idea "undemocratic."

Young people don't conduct realistic courtships, they acknowledge. "Going steady and getting engaged have become a fad." Suggested: fewer movie dates and more walks and talks.

Wait until the boy comes home from service or gets his sheepskin before stepping into matrimony, the students advised themselves after lively consideration. Boys said No and girls Yes to the question of whether young wives should work.

Assistant Publisher Philip F. Miller of the *Tribune* has this to say about the first youth forum:

"The intelligent interest shown by South Oakland County high school students in national and international, in community and personal problems . . . should reassure any doubters that young people of this community are really aware of the problems around them.

"The forum demonstrated that the leadership of tomorrow will be in the hands of young people who are prepared for the tasks ahead — better prepared, by far, than previous generations have been."

An adult consultant, Lou Babcock, retired Highland Park assistant principal, enjoys sitting in as a resource person in a discussion group.



May Public and Parochial School Authorities Maintain a Single School System?

LEE O. GARBER
Associate Professor of Education, University of Pennsylvania

TO WHAT extent and under what conditions may public and parochial school officials cooperate in the maintenance of a single system of schools? In other words, at what point does such cooperation result in changing a public into a parochial school?

This question has formed the basis of litigation from time to time. Its answer is found in the facts of each case and in specific constitutional and legislative enactments.

About two years ago a New Mexico court decision on this topic was considered in this column.[1] Recently the supreme court of Missouri ruled on the same question.[2] While it is to be regretted that certain issues which might have been raised were not raised because of the nature of the appeal, still the decision of the court is significant. It held that in this case, where schools were operated and maintained cooperatively by public school and church officials, they were not free public schools within the meaning of the Missouri constitution and the statutes of that state. Consequently, it ruled that they were not eligible for support from public school funds.

This case was an action for relief brought by resident taxpayers and parents of school children against Reorganized School District 8 and Rock Hill School District 23, their officers, and the treasurer of Franklin County, Missouri. It was contended that the defendants were "illegally collecting, receiving and spending public tax monies . . . in support of schools which are not free public schools but are in fact parochial schools in which a sectarian religion is taught."

The trial court ruled for the plaintiffs, and the defendants appealed. The supreme court considered, in detail, the nature of the appeal. It found that the appellants' brief did not comply with the court's rules and that it properly presented "nothing for our consideration." In spite of the fact that "the appeal should properly be dismissed for the reasons stated and without any consideration of the appeal on its merits" the court apparently decided to consider it because of the "public interest in this case." In so doing, it took jurisdiction on the ground that the appeal involved a construction of the constitution of the state of Missouri and not a federal constitutional question.

District 8 operated and maintained three primary schools — Gildehaus, Ziegenmeyer and Krakow. Until 1931 these were operated by the Roman Catholic church with its own teachers, and religious instruction was provided in the classrooms in accordance with the rules of the church regarding parochial schools. After that date the buildings were used by public school districts — Gildehaus District 41, Ziegenmeyer District 24, and Krakow District 44. Later, these three, together with a fourth district, were consolidated to form District 8. The public school buildings and sites at Ziegenmeyer and Krakow were sold, and District 8 continued to use the buildings of the parochial schools. Title remained in the name of the archbishop of the St. Louis archdiocese, and the property was held for the Roman Catholic church. The district paid no rent for the buildings. Nuns continued to live in the Krakow building, which was within 150 yards of the Roman Catholic church. The Gildehaus building was on the same tract of land as the priest's house, the nuns' home, and the Catholic church. The cupola of the building was surmounted by a cross. District 8 owned and used another building on an adjoining tract.

RELIGIOUS GARB WORN

Rock Hill School District 23 did not maintain and operate a school but paid tuition of those pupils who attended schools in District 8 or in other districts. The defendants had an agreement with the parents by which only the children of Catholic parents attended schools in District 8. Others attended schools in other districts.

The teachers in Gildehaus and Krakow were members of religious orders affiliated with the church—one order taught in one, another in the other school. They were known and addressed by their religious, not their legal, names and wore religious garb at all times. The school board of District 8 never refused to approve teachers assigned by the Mothers Superior of the two respective orders. There were no religious symbols or insignia in either school; neither was religious material distributed in the schools. No religious instruction was provided in the classrooms. Nuns were employed at salaries lower than those ordinarily paid public school teachers. After paying their actual living expenses, income taxes, and payments to the state teachers' retirement fund, they turned the remainder of their salaries over to the fiscal officers of their orders.

CHURCH SERVICES ATTENDED

At times, the Catholic children and the nuns attended Mass at 8 o'clock each morning in the adjoining churches. While Catholic children attended these early services, before school began at 9 o'clock, non-Catholic children waited in the schoolhouse or on the school grounds. If they desired to do so, however, they were permitted to attend church services with the Catholic children.

It also appears that pupils, acting as acolytes or altar boys, were excused from school during school hours to attend religious services, such as weddings and funerals, held in the adjoin-

[1] Garber, Lee O.: Supreme Court Defines Church-State Separation for Public Schools in New Mexico, The Nation's Schools, **49**:69 (February) 1952.

[2] Berghorn et al. *v.* Reorganized School District No. 8, Franklin County et al., 260 S. W. (2d) 573 (Mo.).

ing church. In addition, Catholic children were brought to the Gildehaus school on Saturdays, by school buses, for religious instruction in which the nuns who taught them on school days also participated. The buses, apparently, were owned and the insurance was paid by members of the church parish. District 8 paid the repair and maintenance costs, while other costs were apportioned between the district and the church "in accordance with use."

"NOT FREE PUBLIC SCHOOLS"

The lower court found for the plaintiffs. Among other things, it ruled that the "schools at Gildehaus and Krakow were not free public schools within the meaning of the constitution and laws of the state of Missouri; and that said schools were ineligible for support from public school funds and by public authority." It also ruled that "the joint operation of motor buses for transporting pupils to the Gildehaus school and to the Gildehaus church constituted an unlawful intermingling of the funds of the said school district and of the St. John's Catholic Church."

As a result, it "enjoined and restrained defendants from continuing the arrangement for the joint operation of motor buses and from using any public monies for the joint operation of motor buses under an agreement with the Roman Catholic church . . . from using . . . any public monies for the maintenance and support of either of the Gildehaus school or the Krakow school, as presently conducted and maintained . . . from employing as a teacher in any public school within said District 8 'a teacher wearing a uniform garb prescribed by a religious order of the Roman Catholic church.'"

Further, it enjoined defendants from conducting any school upon property and in a building belonging to the church unless the property was removed from premises on which were located other church buildings and unless such property was validly leased for a definite term under an agreement separating it from the control of the church. Likewise, the court ordered the Rock Hill district and its officers to refrain from paying the tuition of any of its pupils attending the Gildehaus or Krakow schools in District 8.

In their appeal, the defendants made numerous contentions, their theory being that "'if the acts complained of have no pecuniary effect whatever on tax burdens, or serve to make taxes lower than taxes would be in the absence of the acts complained of, the taxpayers cannot be heard to complain, because there is no causal connection between their complaints and their pocketbooks.'"

The supreme court found it "difficult to understand this contention in view of" the stipulations agreed between the parties. It said: "There is no merit in appellants' contention that plaintiffs may not maintain the action. . . . In determining a taxpayer's pecuniary injury resulting from the unlawful expenditure of public funds, we may not weigh lawful expenditures against unlawful expenditures, because no legal injury results from the lawful expenditures of public funds." It added that proof of illegal expenditures of public funds is sufficient to show pecuniary injury, "because of the taxpayer's equitable ownership of such funds and his liability to replenish any deficiency resulting from the misappropriation."

It was also contended that the teachers should have been made parties to the controversy "'in order that their rights may be determined and respected.'" The court, after considering the pleadings and the lower court's ruling, held the matter was not before it for review, but it said: "We are of the opinion, however, that in view of the issues raised and decided there is no merit in appellants' contention."

Finally, in determining the issue presented, the court pointed out that it was not "limited to a consideration of any particular fact separate and apart from all other facts and circumstances shown by the whole record. We must consider the total effect of all of the facts and circumstances in evidence in determining whether the schools in question are in fact free public schools." It pointed out, further, that it need only refer to the agreed facts. In so doing, it upheld the action of the lower court, and said:

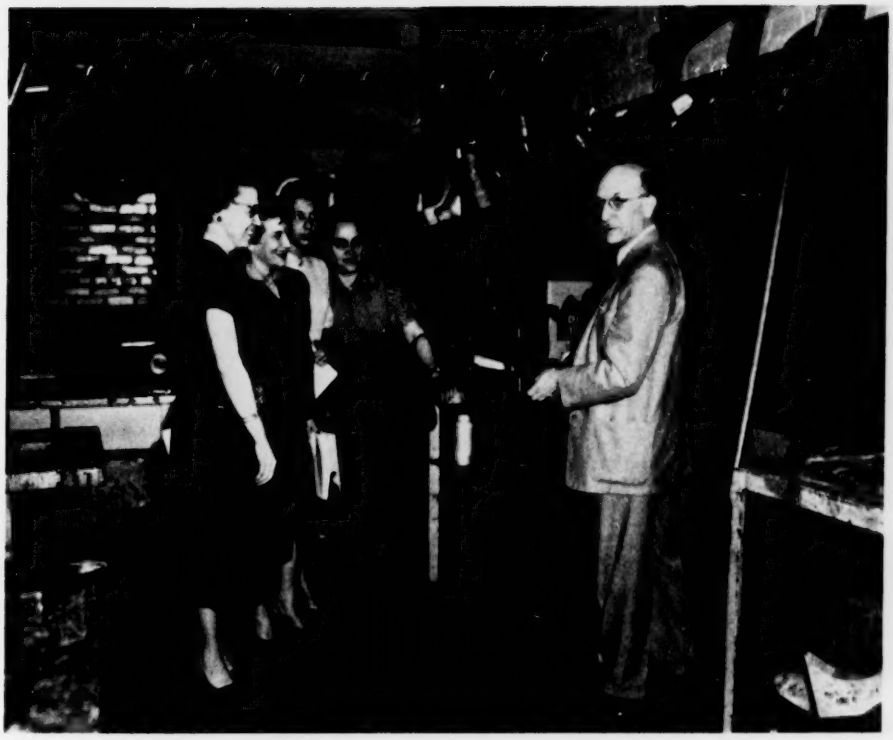
"We think the conclusion is inescapable that these schools as maintained and operated by defendant District 8 and its officers at Gildehaus and Krakow were in fact 'controlled in the main by members of recognized orders of the Roman Catholic church and by officials thereof'; that said schools to a great degree 'were managed and administered in a manner to promote the interests and policies of the Roman Catholic church and of adherents of the Roman Catholic faith'; and that said schools were not in fact free public schools and were not entitled to be supported by public school money or public funds."

EFFECT OF DECISION

The effect of this decision was twofold. In the first place, it had the effect of prohibiting the officials of District 8 from maintaining its schools under the arrangements that had been made with the parochial school authorities. In the second place, it prohibited the officials of Rock Hill School District 23 from paying the tuition of its resident pupils in attendance at the Krakow and Gildehaus schools in District 8 while such schools were maintained and supported cooperatively by public school and parochial school officials.

That Long Awaited Decision . . .

. . . on segregation will be reviewed by Lee O. Garber in the issue following the Supreme Court ruling. Other legal articles in the editor's hopper concern liability of the individual board member for certain wrongful acts of the board, "private" hearings for teachers against whom charges have been preferred, and the constitutionality of a state law providing for a minimum number of women on a school board.



Archie Nevins, head of the industrial arts department, takes four visitors on a tour of that department. All visitors are taken through the entire school plant. They spend three periods in various classes, eat lunch at school, and meet during the last period to discuss their experiences that day with the administrators and teachers.

VISITORS FOR A DAY

learn about their high school

EUGENE S. THOMAS
Principal, Central High School
Kalamazoo, Mich.

ACQUAINTING the public with our schools has become the prime concern of school administrators. Annual reports, newspaper stories, feature articles, radio programs, parent-teacher association meetings, and flyers are all important media for informing laymen about the program of the public schools, but they are not enough. Accepting the old adage, "seeing is believing," our public relations committee toyed with the idea of inviting people to spend a day in our classrooms. We had some doubts about such a program, as it is generally assumed that parents will visit an elementary school but not a secondary school.

Drawing from experience gained by entertaining businessmen for a day during a Business-Education-Industry Day program, we drew up plans for a trial run of wholesale visitation from the community. Our principal purposes were to give citizens an opportunity to see teen-agers at work, to get acquainted with members of our faculty in the classrooms, and to observe the materials, procedures and methods of modern secondary education in their high school.

Faculty members were introduced to the plans, and they agreed to stage three visitation days at three-week intervals. The committee, in turn, promised the faculty an opportunity to evaluate the program after the three trial visits before going further. Our first visitors were to be drawn largely from businessmen participating in our cooperative occupational training program, school personnel, and a few parents.

After three trial visitation days were held, teachers were given an opportunity to evaluate the program anonymously. About 84 per cent of the faculty expressed satisfaction with the classroom visits and was in favor of scheduling them regularly. A large per cent of the teachers believed that visitors should spend a whole day to get the most out of the visit. Because of the favorable evaluations, four additional visitation days were held, and a total of 146 individuals from our community participated last year.

We found that a group of 30 visitors could be accommodated comfortably in our school. The visitors were

asked to report at 8:30 a.m. (when our tardy bell rings) on the appointed day. They were met by student guides in the school lobby and accompanied to the student council room for coffee and rolls. About 30 minutes were spent in getting acquainted and organized for the day's activities. Each visitor's schedule called for a tour of the school plant, a tour of the industrial arts department, three periods in classrooms, and a lunch period. The administrators, the teachers who were free, and all of the visitors met during the last period of the day to discuss the day's experiences.

We found the following to be some of the most important factors for a successful day of visits: preliminary faculty approval and cooperation; "business as usual" in the classroom, with no special exhibitions; not more than two visitors in a single classroom, and preferably only one, and a complete schedule of visits for individual teachers at least 24 hours in advance. It is important that each teacher assign class members to meet the visitor in the central meeting place at the beginning of the hour, conduct him to the classroom, and accompany him back at the close of the class. Visitors enjoy this individual contact with students, and students profit as well. Each visitor should be assigned to at least one class of his choice but not to his own child's class unless both the child and parent have agreed that it is advisable.

At first the obtaining of visitors seemed to pose a problem. The first groups were chosen from organizations that had shown a direct interest in the school, such as the parent-teacher-student organization, citizens committee, Kiwanis Club, and others. Invitations made in person or by telephone were followed by a letter of confirmation which gave more specific instructions as to the day's program. This method proved to be extremely successful. We did not shy away from those who were critical of public education or the school. We thought this was a golden opportunity to let them see for themselves. School board members, administrators and teachers from other sections of the school system were high on the list of prospects. As time went on parents formed the larger percentage of our groups. We gave our counselors and teachers the privilege of inviting parents because we realized that they have closer contacts with them. The success of this method was proved by the fact that we are now hard pressed to accommodate those who want to come.

During the first visits many of the teachers were ill at ease, but experience developed security and confidence. The students rose to the occasion and accepted the visitor as one of the group. Rather than being a disrupting influence, visitation stimulated classroom activities.



The visitors' day in high school opens with an orientation period. Coffee and rolls are served while Principal Eugene S. Thomas (standing at table in picture above) and others outline the plans for the day's activities.

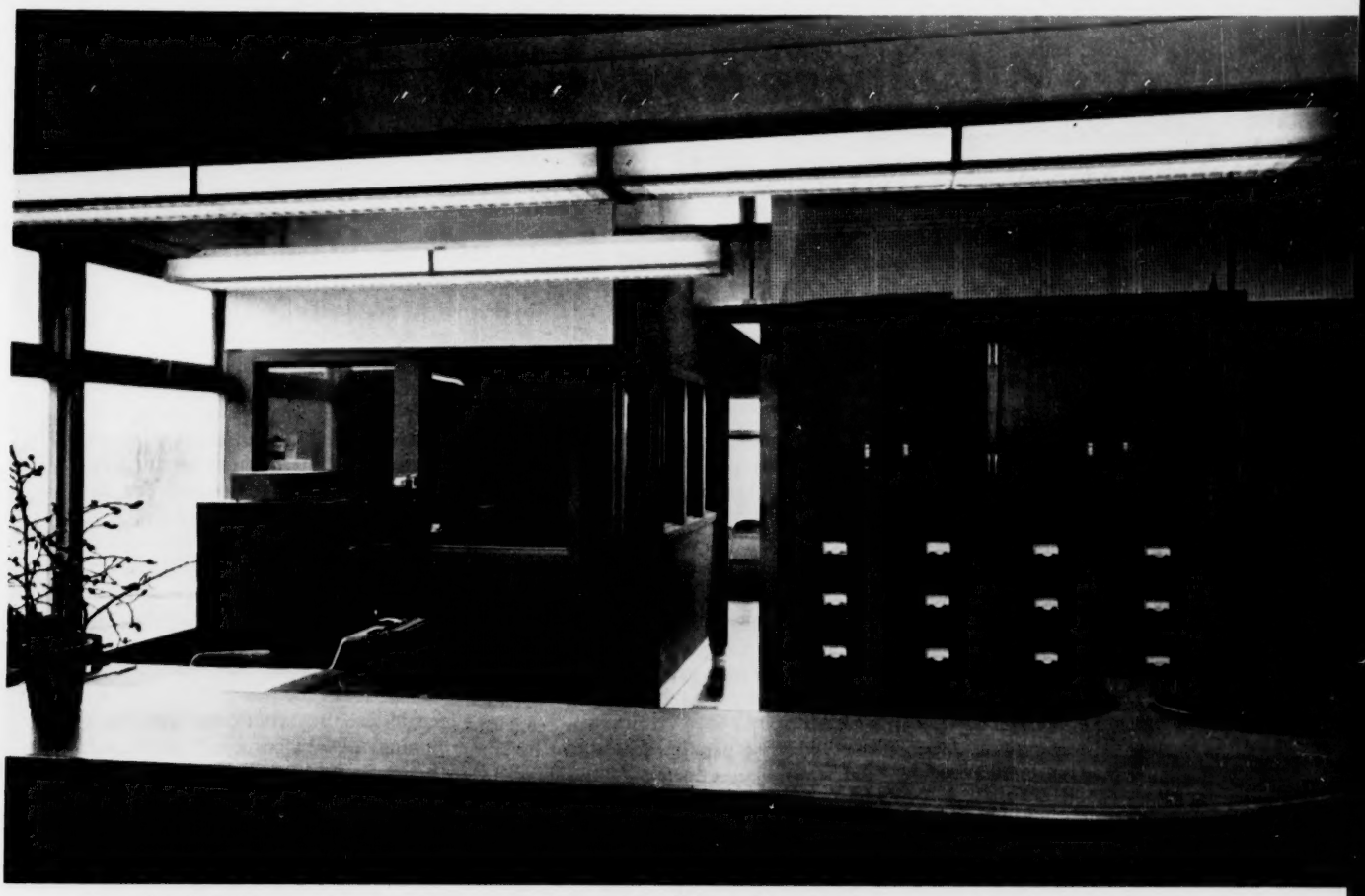


VISITORS IMPRESSED

The discussion period at the close of the day was the pay-off. The pattern of remarks ran about the same with each group. These opinions were expressed in our groups repeatedly: Students are serious, friendly and courteous. Teachers are well trained, democratic and really interested in the students. Methods of teaching have changed drastically for the better. A modern high school offers many new and important activities for youth. The behavior of students in both the classrooms and the corridors is excellent. The building should be modernized to meet the needs of modern teaching methods and activities. Visitation programs are a real opportunity for citizens, teachers and students and should be held regularly throughout the year.

The greatest interest on the part of visitors is always shown in remarks about the industry of the students and the high caliber of the teachers.

This year we are holding visitation days on a monthly basis. The enthusiasm of our visitors has carried into the community, and it is easy to find 25 or more visitors. The idea that "people will not take time to visit the high school" has proved a myth. A new avenue for interpretation of our school has been established.



Many details of the economical use of space are illustrated in the office facilities of the Martha Lake School at Edmonds, Wash. The office was designed for a seven-classroom building in which the principal will be a full-time teacher. A full-time secretary directs the activities in the office area and supervises the library, health unit, and operational details of the school. The secretary is strategically located to observe all the activities in this part of the building. Within four years this school building will have about 20 classrooms, and at that time there will be some shifting of spaces in this area. Partitions and cabinet work are movable, and it will be easy to reallocate these spaces. Note particularly that there is no waiting space in the office. The corridor serves as the waiting area. The counter is low so that even the smallest children can talk to the secretary over the counter. The office area is attractive, pleasing not only to the children but to adult visitors. See the article starting on page 66.

SCHOOLHOUSE PLANNING

Space Allocations for Elementary School Buildings

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Laboratory for International School Planning Institute

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Space Allocations for Elementary Schools

Table of areas governs state aid distribution for schoolhouse construction in Washington

HAROLD SILVERTHORN
Consultant in School Building Facilities
Washington State Department of Public Instruction

IN MAY 1951 the Washington State Board of Education adopted a table of area designations specifying space requirements for particular facilities in an elementary school building to be used as a basis for determining state aid to local districts for schoolhouse construction.

The table of area designations recommends sizes of all elementary school facilities based upon the number of children to be served. It was designed to assist communities, educators and architects in planning desirable and economical school buildings. This table suggests reasonable space requirements for all the presently accepted facilities of the elementary educational program such as classrooms, multipurpose rooms, library, office space, heating plant, kitchen, health units, teachers' rooms, workrooms, corridors, storage areas, and toilet rooms.

The plan is an approach to the problem of space allocations for school buildings faced directly or indirectly by every school district planning a building. Nearly every state with a school building assistance program for capital outlay has recognized this problem of space allocation and has suggested a solution. A common approach has been to place limitations on the amount of money that can be spent per pupil on a particular school building. Such procedure places hardships on many school districts and penalizes them for factors over which they have no control, such as variations in labor costs, difference in costs and availability of material, location and nature of site, number of contractors submitting bids, and local building code requirements.

Too, there is wide variation in the number of pupils to be housed. This factor places the small school in an adverse position when compared to the larger school. The per pupil cost of a 20 room elementary school is less than the per pupil cost of a six-classroom building. This is particularly true when all of the special purpose facilities necessary for a well rounded educational program have been included in the facilities.

Another common approach to this problem is to limit the per pupil square footage in the total building. A widely used square foot limitation per pupil is 55 or 60 square feet. This likewise puts a small school building project at a distinct disadvantage. It is far more difficult to construct an elementary school building of six classrooms with special purpose facilities within a limited square footage per pupil because a much higher square footage per pupil is required to give the same basic facilities than is required in a larger elementary school building. In states in which a square foot per pupil limitation exists it has been necessary to eliminate many areas considered valuable to the total educational program, such as playrooms, conference rooms, storage space, health unit, library and other facilities. In some instances the square footage per pupil has been so low that the only school facilities the school district could acquire within the per pupil limitations are classrooms, toilet rooms, boiler room, and a small office. Corridors, libraries, health units, play space, auditoriums were eliminated.

Educational Advantages Limited. To limit costs, particularly in metropolitan areas, school districts often construct portable classrooms rather than

Area Designations (Number of Square Feet Allocated

No. of Class-rooms	Class-rooms	Multi-purpose	Library	Adminis-tration	Service System	Kitchen	Health Unit	Teachers
1	960		281	(1)	93	100	(1)	(1)
2	1,920		534	(1)	176	140	(1)	(1)
3	2,880		776	(1)	257	170	(1)	(1)
4	3,840	2,000	982	(1)	339	200	(1)	(1)
5	4,800	2,400	516	240	419	225	180	165
6	5,760	3,120	640	277	499	250	220	195
7	6,720	3,120	750	314	586	275	260	225
8	7,680	3,120	830	351	662	350	280	255
9	8,640	3,750	895	388	739	375	300	285
10	9,600	3,750	960	425	816	400	320	315
11	10,560	4,050	1,008	462	899	440	340	345
12	11,520	4,050	1,056	499	982	480	360	375
13	12,480	4,550	1,104	536	1,062	520	377	405
14	13,440	4,550	1,152	573	1,142	560	395	435
15	14,400	5,000	1,200	600	1,229	600	413	465
16	15,360	5,000	1,248	637	1,312	640	430	495
17	16,320	5,400	1,296	674	1,392	680	447	525
18	17,280	5,400	1,344	711	1,469	720	465	555
19	18,240	5,800	1,392	748	1,552	760	483	585
20	19,200	5,800	1,440	785	1,683	800	500	615

(1) For buildings of four or fewer rooms, these items are combined with the library.

complete educational facilities. This reduces substantially the total amount of money expended for a school building project. Also, one can readily recognize the fact that educational advantages of the children assigned to these portable classrooms are definitely limited. Often there are no play, office or storage space, lunchroom facilities or other desirable special purpose facilities.

The question inevitably rises as to why it is necessary to limit the facilities provided for the children in the school building program. If every school district had sufficient money to supply all necessary facilities this problem of limitations would not arise. However, few school districts have sufficient funds available to buy all the space necessary to house all the youngsters. Consequently, economies have to be made or something has to be eliminated. As a result, it is necessary to strike a trilateral balance in total planning among the educational requirements, environmental needs, and finances available to construct the building.

Unfortunately, many times those responsible for the school building planning and financing are not conscious of the fact they are allocating spaces by default through lack of proper planning. When bids are in excess of the amount of money available to finance a project and when it is necessary to eliminate some portion of the project there must necessarily be a decision on what spaces can be retained and what spaces can be eliminated. Confronted with this situation, the school district finds it is too late to do any constructive planning for space allocations assigned to particular facilities. Some spaces that could have been decreased in size during the preliminary stages of construction are retained because to reduce these areas would necessitate a complete redesigning of the final plans. As a result, classrooms at the end of the building or a multipurpose room will be eliminated to enable the project to keep within the funds available.

Ideal Layout Not Always Ideal. The second factor concerned with assignment of space and often elimination of portions of the building is the fact that teachers and administrators brought into the planning of the new facilities usually outline an ideal layout to house the educational program they would like to see for the children. Frequently space assigned is in excess of the needs of particular facilities. As a result, either during or after the planning period someone must cut down the space allocations or limit the scope of the project at the time the bids are received.

Many improvements in modern school buildings can be attributed to the assistance of educators and others in helping to plan the general layout of the building; nevertheless, complications have arisen as a result of participation of educators and other interested persons in a school building project. Square footage allocated to the various areas of the building has been tremendously increased, in many instances to the point where the relationship between the square footage desired for the educational program and the finances has been thrown completely out of balance. All too often the board members will take an unrealistic approach to solving a problem and hope that the bids will come in especially well and that they will get all the facilities they have planned with the money they have avaliable. As a safeguard, the architect is frequently instructed to set up alternate bids on certain portions of the building to facilitate elimination of them in case bids are in excess of money available.

Table of Area Designations. The table of area designations adopted by the state board of education of Washington was designed after careful analysis of 43 elementary school buildings equipped with all facilities considered desirable to meet the needs of a modern educational program. This study of complete elementary school buildings constructed in the state of Washington from April 1947 to June 30, 1950, revealed a variation of from 63 to 133 square feet per pupil. This fact alone pointed up the problem. The wide variation in space per pupil clearly indicated everyone concerned with planning an elementary school building has a different concept of the necessary space requirements. It indicated that architects tend to follow an experience pattern in making space allocation unless educational specifications and allocations are provided so that they can design a layout in terms of actual educational requirements for particular facilities. The study also indicated that to achieve an economical layout for an elementary school building definite consideration must be given to space allocations for specific areas.

Consultants from the office of the state superintendent, engaged in the study of these 43 elementary schools, recognized the importance of careful planning as a necessary prelude to economical construction. Particular emphasis was placed on the elimination of waste space and on the complete use of every part of the building for

to Each Area) for State Aid to Elementary Schools

Work-room	Storage	Toilets	Corridors	Add 8% for Walls and Partitions	Gross Total Area	Pupil Capacity	Area per Pupil	No. of Class-rooms
(1)	60	105	282	164	2,045	30	68	1
(1)	120	210	547	317	3,964	60	66	2
(1)	180	315	808	468	5,854	90	65	3
(1)	240	420	1,415	821	10,257	120	85	4
120	300	525	1,745	1,011	12,646	150	84	5
128	360	630	2,132	1,236	15,447	180	86	6
136	420	735	2,390	1,385	17,316	210	82	7
144	480	840	2,646	1,534	19,172	240	80	8
152	540	945	3,002	1,740	21,751	270	81	9
160	600	1,050	3,246	1,882	23,524	300	78	10
168	660	1,155	3,545	2,055	25,687	330	78	11
176	720	1,260	3,790	2,197	27,465	360	76	12
184	780	1,365	4,123	2,490	29,876	390	77	13
192	840	1,470	4,367	2,532	31,648	420	75	14
200	900	1,575	4,691	2,719	33,992	450	76	15
208	960	1,680	4,936	2,861	35,767	480	75	16
216	1,020	1,785	5,251	3,044	38,050	510	75	17
224	1,080	1,890	5,495	3,185	39,818	540	74	18
232	1,140	1,995	5,811	3,369	42,107	570	74	19
240	1,200	2,100	6,064	3,515	43,942	600	73	20

(1) For buildings of four or fewer rooms, these items are combined with the library.

school purposes. For example, a kitchen with a large amount of floor space is not necessarily an efficient kitchen. A compact kitchen, planned around the activities which are to take place and the average number of persons to be served, will save steps and time, reduce personnel, and cut maintenance costs.

Through a study of the geometry of space, it was found that another space saver was the use of square rather than rectangular unilaterally lighted classrooms.

The study revealed that the percentage of square footage in the total building used for corridors varied from 11 to 38 per cent of the total area of the building. Obviously, if it is possible to reduce the amount of corridor space in a well planned school building to 11 per cent of the total area, the building with 38 per cent of the total area in corridors is badly designed and wasteful of square footage.

In some buildings the area assigned to storage space was far in excess of the space requirements in the average building. It was apparent that some architects used dark spaces where buildings turned a corner for storage areas rather than finding other more desirable uses for these spaces or other arrangements of floor plans. Boiler rooms were far larger than the space required for the boiler and other heating equipment.

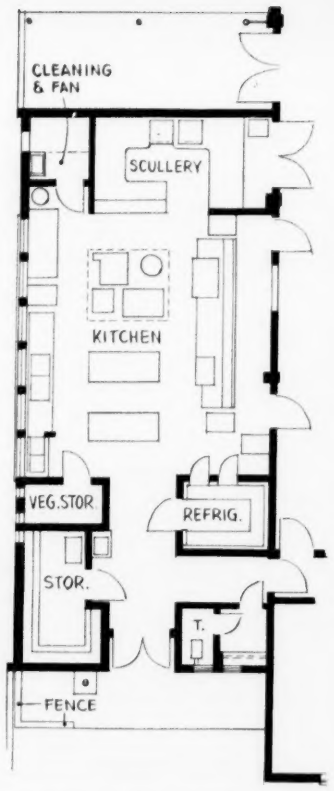
In some instances the administrative quarters were in excess of the space required for the administrative unit. A contributing cause of this overdesigned administrative unit was the fact that the majority of school people were not familiar with blueprints and even after reading them did not comprehend the actual measurements.

The studies revealed that multipurpose rooms were frequently oversized. Contributing to this oversize space is the problem of the care of children on rainy or cold days. Space for indoor activities in inclement weather was considered of paramount importance. Frequently, when the multiplicity of activities to be carried on in this room was analyzed, the spaces needed for basketball, auditorium activities, lunchroom, community use and so forth required a room far in excess of a reasonable size.

Surprising as it may seem, the one room that was either forgotten or made too small was the library. It is the opinion of most educators that the most valuable space in any school building from an educational point of view can be and is the library. However, the space left over was assigned to the library after all the other educational functions were considered. Where funds were short the library was eliminated.

Functions and Space Requirements Studied. Before the table of area designations was planned, all of the functions of every facility and the space requirements in all sizes of schools were studied carefully. The area designations are based upon the needs of schools ranging in size from one to 20 classrooms, from fewer than 30 to more than 600 pupils. With this table readily adaptable to meet the requirements of all school districts in the state, citizens, school boards, and architects have a guide available enabling them to plan for the most economical investment of funds in school buildings without any curtailment of the educational program. The state board of education does not put any restrictions on the expenditures of the local district. If a school district should elect to construct a building with greater total area than that indicated in the table of area designations for a given pupil capacity, it is then the district's responsibility to pay from its own funds any excess costs.

General Appreciation and Acceptance. What has been the outgrowth of the use of this area designation table in the state of Washington during the last year and a half? Without any equivocation one can say that there has been general appreciation and acceptance of this table of area designations. Few objections have been voiced to the use of the table for the allocation of state funds. Schoolmen have recognized it as an instrument for more effective allocation and use of state funds for desirable school facilities in every school district throughout the state of Washington. Architects have been most appreciative of the table of area designations because it provides a flexible guide for them to use in designing the school facilities. Not one architect has said the area table has placed any restrictions on him in designing the layout of an elementary school building. In general, the architects have accepted the area designations as a challenge for improvement of function and design. Part of this is due to the fact that the office of the state superintendent has not demanded rigid conformity to the space allocations except in total square footage assigned to the building.



Shoreline school district, Seattle, Wash., has demonstrated that it is possible to design an efficient kitchen arrangement for a school within a limited square footage.

Through the good work of the educator and the architect, an increasingly higher percentage of the total square footage in elementary school buildings is used in the classrooms. The office of the state superintendent recently received a preliminary sketch for a complete elementary school building in which 51 per cent of the total area for the building was used in the actual classrooms. This statement may not seem significant to the average layman —unless he checks the square footage in his local elementary school buildings. If he measures one of the old two-story with basement structures constructed between 1900 and 1915, he will really be impressed with this high percentage for classrooms. In the typical 1910 school building approximately a third of the total square footage was used for corridors and stairwells. There was tremendous waste space in the basement area, much of which was entirely unusable except for storage space. Many of the special



Three women prepare and serve nearly a thousand meals every school day in this kitchen in the Shoreline school district, Seattle, Wash. The preparation facilities and serving counter are so placed as to save steps.

purpose facilities, such as health unit, teachers' room, library and other facilities, were omitted entirely. Though many necessary special purpose facilities were omitted, not more than 30 per cent of the total building was assigned to actual classroom space.

In general, if a new elementary school building today has as much as 40 per cent of the square footage in actual classroom space it will be fairly unusual because of the increasing number of special purpose facilities that require a great deal of space. In addition to these there is space used for boiler rooms, storage areas, corridors, toilet rooms, transformer vaults, kitchens and other service areas.

Use of the table of area designations has encouraged those people engaged in planning school buildings to become more and more conscious of space allocations and of the efficient and economical educational use of particular special purpose facilities. If the table of area designations has merit, it is probably due to the fact that no attempt has been made through this instrument to eliminate the special purpose facilities. However, a conscious effort has been made to improve these facilities so that they can serve a greater and more efficient educational function within a limited amount of square footage.

Those engaged in school planning in the state of Washington have been able to reduce significantly the number of square feet per pupil without eliminating special purpose rooms and without decreasing the size of the space to the point where the educational program would be handicapped. In the 43 elementary school buildings having all facilities considered desirable to meet the needs of a modern educational program, there was a variation of from 63 square feet per pupil to 133 square feet of area per pupil. The limitation of 75 square feet per pupil in a 12 to 20 classroom school building is seldom, if ever, exceeded, and in most instances the square footage per pupil is under this amount. It is not unusual to receive plans for complete elementary school buildings with all necessary facilities where the space area ranges from 60 to 65 square feet per pupil.

Definite Trend Toward Self-Contained Classroom. In the new elementary school buildings there is a definite trend toward the self-contained classroom. Necessary facilities have been designed into the classroom. Adequate storage space has been provided. There are individual classroom toilets, lavatories and sinks where the water for painting and other classroom uses is readily available. Consequently, the necessity for moving groups of children or individuals in the class to other parts of the building has been virtually eliminated. Music is taught in the classrooms. Hot lunches are served in the classrooms. Pianos mounted on dollies are readily moved

into the classrooms. Individual classrooms are provided with darkening curtains so that visual aids may be used. Easels and worktables are provided in the classrooms so that all phases of art and crafts work may be taught there. Portable kitchens with all the pots and pans necessary for teaching home economics are readily moved into the classrooms so that the teacher may provide home economics instruction on all grade levels. In a number of schools, portable workbenches have been provided so that some phases of shop and craft activities can be taught in the individual classroom.

With the almost universal acceptance of the self-contained classroom the important function of the corridors has been reduced to a minimum. A recent study of a school building with a capacity of 300 pupils indicated that with the self-contained classroom setup only seven persons made use of the corridors from the opening of school in the morning to the closing of school at noon. As a result of these studies and observations by school people and school patrons, the question has arisen whether it is necessary to have closed corridors in a school built around the idea of self-contained classrooms.

In the typical elementary school building built in 1910, corridors were often 18 and 20 feet wide. After World War II it was at first thought that there was no necessity for having elementary school corridors more than 10 or 12 feet wide, depending on whether or not lockers were used in the corridors. However, in recent years most school building planners have questioned whether double-loaded corridors in elementary schools need to exceed 8 feet in width and whether single-loaded corridors should exceed 6 or 7 feet in width.



This self-contained classroom is in the Roosevelt School, Olympia, Wash. All desirable classroom activities can be carried on in the room. Much of the cabinet work is movable, as are the workbenches and tables. A piano on a dolly is moved into the classroom during the music period.

CLOSED CORRIDORS ELIMINATED

In school buildings planned around the self-contained classrooms there are indications that even in colder areas of the state of Washington, where seasonal subzero temperatures are not unusual, closed corridors may not be necessary. Self-contained classrooms, back-to-back, with closed corridors entirely eliminated, have become increasingly popular. When this arrangement is used, open corridors with roof projections over paved walkways have come into common usage.

Where there is a prevailing wind, a finger plan arrangement of self-contained classrooms with open corridors is used so that proper orientation from the prevailing winds can be achieved to protect the person using the open corridors. Two large high school buildings with open corridors are now in use in the state of Washington. It is the opinion of the administrators who observed these plants in operation that there is no objection to having the students move every 50 minutes between classes even though students do not take their wraps with them. One of the superintendents commented that during the planning stage several of the parents objected to the open corridor arrangement, believing colds might be induced. However, in actual operation the youngsters have enjoyed a couple of minutes in the open corridors. And, as one might expect, there is no instance of youngsters' shivering as they walk down the open corridors to their next classroom.

The most obvious solution of the architect's problem of keeping space allocations within the area designated for corridors is design of the building around square classrooms. Several studies regarding the geometry of space have indicated that the square type of classroom will cut the length of corridors and outside walls and at the same time increase the amount of square footage within the perimeter. An actual example in our files was the redesign of a building set up originally for rectangular classrooms 40 by 24 feet that were changed to square classrooms with 960 square feet of floor space. In this 16 classroom building the corridors were shortened by 58 feet in the change from the rectangular to the square classroom. In the opinion of most educators the square classroom is far more desirable in providing for a modern educational program.

As a result of the table of area designations, kitchens are more efficiently planned and more economical to construct. In the studies made of complete elementary school buildings, before adoption of the table of area designations, it was found that in a few instances kitchens were three times as large as they needed to be. It is apparent that a kitchen with a large amount of floor space is not necessarily an efficient kitchen; conversely, a compact kitchen planned around activities that are to take place in the facility and the average number of persons to be served will save steps and time, reduce the personnel needed, and cut maintenance costs.

Kitchens are now designed by school dietitians and cooks working in conjunction with the school lunch supervisor in the office of the state superintendent. As a result, elementary

school kitchens are planned for the specific job of serving lunches to school children and are designed to perform this function efficiently with the least kitchen help.

Administrative Offices. Administrative quarters are using less of the total square footage in the building and are better designed to serve the function for which they are intended. Frequently the principal and superintendent of a school district will have major responsibility for coordinating and planning the proposed elementary school building. As a result the principal will be particularly conscious of the need for additional space. Sometimes there is a tendency for the principal to overdesign his own office space. During the preliminary planning period it is not unusual for a school principal to think he needs a private office that is approximately 18 by 24 feet. When he realizes that this space is larger than the average size living room in a residence, he is perfectly willing to revise his space requirements to a more realistic size.

For some unaccountable reason, nearly all designs of elementary school administrative units show a fireproof vault for the elementary school building. Many such fireproof vaults have been constructed in elementary schools throughout the United States. Probably the most expensive part of the vault is the door, which costs from $300 to $1500. It is not common practice to keep the elementary school records in the vault. We have observed that about the only things kept in these fireproof vaults are the receipts from the sale of lunches and a few assorted athletic supplies. It has been our judgment for a long time that it is impossible to justify increased square footage and the added cost involved in supplying a fireproof vault and door for an elementary school building.

An item almost invariably found in the elementary school buildings, as shown by the plans contained in the current school building magazines, is the waiting or reception room in the administrative suite. Evidently the architect and the principal have a misconception of the use of this area. Some of these waiting rooms are sufficiently large to accommodate from 15 to 20 persons. But this facility is not used in the manner for which it was designed. The secretary will call a pupil with whom the principal desires to speak; the youngster will come to the office and be taken immediately into the principal's office without having to wait. Comparatively few salesmen visit the principal, and a parent who had a problem would not be left waiting in the anteroom of the principal's office.

As a result of studies of the function of these administrative offices by educators and school planners in our state, the waiting room of the administrative suite is becoming nonexistent. Instead, the general office is separated from the corridor by a low counter and the corridor becomes a waiting room. The secretary's desk and typewriter are movable and can be taken into a storage room at the end of the day with a minimum of inconvenience.

Administrative offices have become one of the most attractive portions of the building through a desire on the part of the principals to try to make this portion of the building attractive and inviting to children. An effort is being made to provide an attractive facility that will draw the youngster to the principal as his friend and adviser.

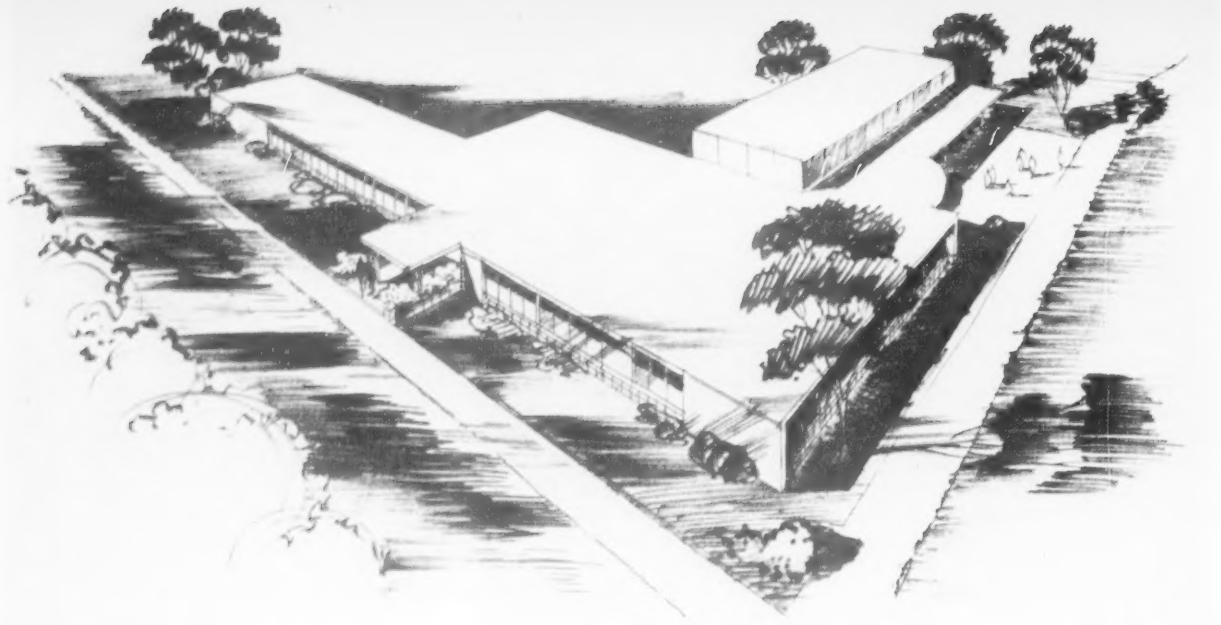
Better planned libraries in elementary schools have come about as a result of the area designation studies. In the opinion of the modern educator, the library is the heart of a good educational program. In the larger, more attractive, and better planned school libraries, children are encouraged to read widely in current fiction and biography and are adding substantially to their fund of information. Few complete elementary school buildings are constructed in Washington without adequate libraries.

Classroom Toilets. Individual classroom toilets have increased significantly not only to enable the classroom to perform the function of the self-contained classroom but also materially to reduce the total area assigned to banks of toilet rooms. There was no thought of saving square footage by this means in the early stages of our studies. In the trend toward individual classroom toilets a controversy arose on whether individual classroom toilets cost more than large banks of toilets. Most people, and architects in particular, believed that individual classroom toilets would cost considerably more than the banks of toilets. Alternate bids taken to permit cost comparisons finally established the point that the individual classroom toilets cost no more, and now, with the simplified design of the individual classroom toilets, it has been established that individual classroom toilets cost substantially less than banks of toilets.

Architects in Washington have devised at least a dozen possible arrangements for individual classroom toilets. The most commonly used arrangement is a space approximately 3½ by 5½ feet entirely within the classroom, with a similar toilet room on the other side of the classroom wall. In this individual toilet room there is one water closet of the tank type. The lavatory is mounted on the classroom wall so the teacher can supervise handwashing after use of the toilet. In most instances six plumbing items, the sink, the water closet, and the lavatory in two rooms are vented off the same stack, thus cutting down the necessary plumbing. Another accepted plan, used primarily in Grades 3 to 5, is to have the rooms side by side but interconnecting through two adjacent classrooms by a small corridor, thus permitting the boys and girls to use separate facilities but still making possible adequate supervision by the classroom teachers.

Individual classroom toilets, it has been found, take far less total square footage than banks of toilets. If classroom toilet rooms are 3½ by 5½ feet, less than 400 square feet of the total building would be used for toilet rooms. Also there would be available about 60 square feet that could be used for small banks of toilets strategically located to provide toilet facilities for the multipurpose room and supplementary facilities for the individual toilets wherever necessary. Normally, a 20 classroom elementary school building would assign approximately 2100 square feet for banks of toilet space. Through use of individual toilets, it is possible to save 1600 square feet or more. While this may not seem a significant saving, it adds up to nearly the square footage assigned to two regular classrooms.

Better Planning. It is possible for us to show through actual case studies that not only has the table of area designations resulted in reduced square footage per pupil in the elementary school building but it also has decreased waste space and little used space throughout the building. More important than the economies effected through the use of area designations is the fact that buildings are better planned to fit educational needs.



Proposed building for school planning institute, Indiana University

Industry to provide laboratory at Indiana University for international

SCHOOL PLANNING INSTITUTE

THE board of trustees of Indiana University has accepted a proposal for establishment of an international school planning institute and laboratory on the campus at Bloomington. This action of the board was followed, on April 23, by the chartering of a nonprofit corporation known as the Indiana School Planning Laboratory Fund, Inc. This fund will finance the laboratory plant for the institute.

The entire project, as approved by the Indiana University Board of Trustees, involves construction of the building and a wide range of services in the field of school building planning.

Herman B. Wells, president of the university, in a statement to The NATION'S SCHOOLS, declared that "the possibilities of this forward step are tremendous." Similar promises for the proposed institute are foreseen by Dean Wendell W. Wright of the university's school of education.

President Wells said: "Indiana University is gratified with the initial steps in setting up on an international basis the Institute for School Planning.

"The companies and individuals giving time and money to establish the institute and its research and laboratory building demonstrate one of the characteristics of a democracy, namely, the willingness of industry and business to stimulate and provide for research through financial contributions to our universities.

"The proposed institute fits into the anticipated expansion of Indiana University. In the field of school building planning, the university has three functions: training and education, research and service. Within the institute all three of these areas can be greatly expanded. In fact, the possibilities of this forward step are tremendous."

Opportunities in service, research and teaching through the institute also are foreseen by Dean Wright in his announcement that Paul W. Seagers will become the director of the institute as part of the school of education.

"The plans for the institute," Dean Wright said, "will make possible an educational laboratory provided by industry for the purpose of improvement of education of children through better building environment. Such a joining of mutual interests bespeaks great promise for the future of education. Our anticipations for this program are unlimited in kind and scope."

The official announcement states:

"The institute will be on a more extensive basis than others now in existence. In its national and international aspects it will cooperate with centers in other universities in the United States and in other countries.

"The purposes of the International Institute of School Planning will be:

"1. *Teaching:* (a) To assist prospective school administrators to meet licensing requirements in the various states; (b) to prepare superintendents and assistant superintendents in charge of plant to do a better job in school plant planning and operation; (c) to

make teachers more aware of the school plant as a teaching aid; (d) to assist all interested participants in the technics of cooperative planning; (e) to prepare college instructors to teach school plant planning.

"2. *Conferences:* To conduct conferences on general as well as specific phases of school plant planning.

"3. *Demonstration:* To provide facilities for demonstrating the known physio-psycho-physical principles of good educational environment.

"4. *Field Service:* (a) To provide assistance in the field of school planning similar to that now being provided by the Indiana University School of Education; (b) to provide lecture service in school planning to organizations and institutions on a national basis.

"5. *Research:* To act as the center for an extensive research program involving the relationship between child learning and a child's tendency to come to balance with the various factors in his environment and the resulting effects upon his general well-being and health.

"6. *Publications:* To publish the results of research periodically in a form which can be understood by the layman and to provide for wide distribution of the research results."

PURPOSE OF FOUNDATION

The nonprofit, philanthropic foundation, set up and incorporated in Indiana under the name of the Indiana School Planning Laboratory Fund, Inc., states that its purpose is to raise funds from industry and other sources to build the laboratory for the university as a noncommercial, educational project.

The work to be done in the institute or in the plant will not be engineering or architectural research but will be educational research to gain a better understanding of the child development and learning functions of the school plant.

Officers of the foundation currently serving are: F. I. Wilson of Vermilion, Ohio, president, and D. B. Harmon, Austin, Tex., secretary. Paul W. Seagers, consultant for school building planning at Indiana University, is director of the foundation on the campus. Alvin E. Meyer of Indianapolis is acting as attorney for the foundation and is a member of the board of directors.

Edward D. James, Indianapolis architect, is architectural consultant to the foundation.

TO COST $250,000

Eight more directors will be added to the board at a meeting to be held before the end of the school year. It is expected that the project will involve approximately $250,000 for building and equipment.

The foundation is undertaking to provide the building and equipment only, as the university board of trustees will maintain and operate the institute, although the current plans of the foundation include possible financing of research fellowships.

The preliminary planning of the proposed Institute on School Planning was done with the assistance of a faculty committee representing a number of departments of the university, including education, physiology, pediatrics, optometry. It is anticipated that such a committee will be maintained as a permanent advisory group to the research to be conducted in the institute.

The over-all design and the general program for the laboratory were worked out with university representatives by D. B. Harmon and his staff as the second of a projected series of school planning laboratories, the first of which was the coordinated classroom laboratory in the school of education at Stanford University. The initial development and financing of these laboratories are being done through Dr. Harmon by certain industries for which he acts as educational consultant.

Elevations. Four elevations of the proposed building are shown in the accompanying drawings. The changeable portion of the windows in experimental areas has been indicated in these drawings by a shaded area.

The front elevation shows, left to right, the administrative area, the lounge, and the main entrance to the grand foyer.

The left elevation includes the children's entrance to the experimental classrooms, the fenestration area for the intermediate and secondary experimental rooms, and the window section for the library and planning area.

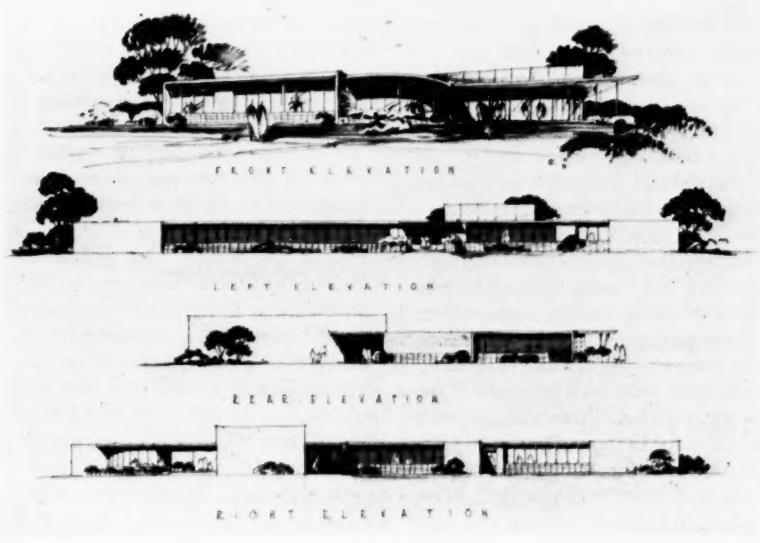
The rear elevation shows the back of the auditorium; the back of the three special laboratories for light, heat and sound, and the fenestration section of the large primary room.

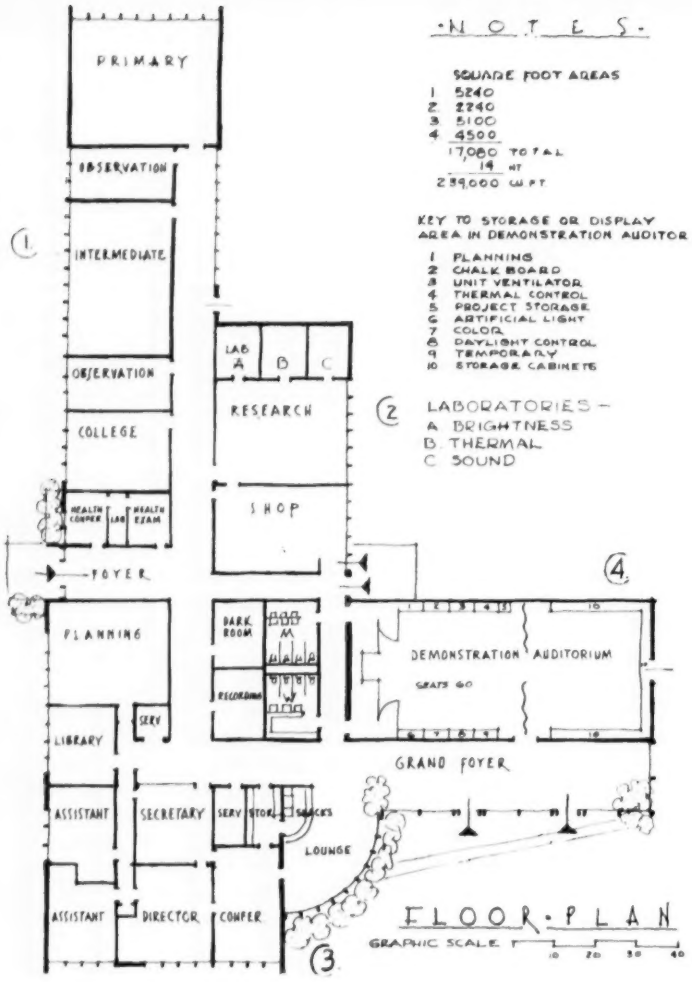
The right elevation shows the side of the grand foyer, the end of the auditorium, the research area, and the corridor windows in the experimental classroom area.

The perspective drawing of the building (*p. 72*) faces a corner of the administrative area. The building is to be located on a site near the present school of education building so that children can go from the university's demonstration school to the experimental classrooms in the institute without going through major traffic. The entrance shown to the left in the drawing is the children's entrance to the building. The entrance for adults and the entrance for general school planning meetings is shown at the right.

The elevated roof to the right is the roof area over the demonstration audi-

Shaded areas are changeable windows.





torium. The street to the right of the drawing is a major thoroughfare passing alongside the campus, making it possible for visitors to the laboratory to go directly from any place on the campus to the institute or to come in from out of town and go directly to the building without driving through the campus or through areas used for children's traffic.

Floor Plan. The floor plan of the proposed institute is divided into four major sections, as shown on the accompanying plans with the numbers 1, 2, 3 and 4.

Section No. 1 is the experimental area in which classrooms can be rearranged virtually overnight to produce any type of environmental situation that the experimenters want to test in an actual teaching situation.

Three rooms are provided in this experimental area: a square room, labeled "primary" in the accompanying plans; a rectangular room, labeled "intermediate," and a smaller rectangular room, labeled "college." The "college" room will also be used for secondary school classroom experiments.

These rooms are to be constructed so that the fenestration is independent of bearing walls and structure. Lighting can be changed by removing glass panels and sill and substituting other window designs, with a minimum of labor.

Each of the rooms will be equipped with leads for various types of heating and ventilating, such as radiant floor and ceiling panels, unit ventilators, convection systems, and the like. These rooms also will be equipped at the ceiling with an electric supply that can be tapped at any point to provide 50 watts per square foot, permitting the use of any type of electric lighting equipment.

In addition to the removable window panels at the customary window positions, the primary room is so constructed that a bilateral opening can be put into service as well as a unilateral clerestory opening, thereby permitting all of the various types of daylighting solutions used in deep rooms.

In effect, these classrooms are shells within which any type of wall or vertical working area, fenestration, electric lighting, decoration or heating and ventilating arrangements can be made.

Observation rooms are provided between the various classrooms, with one-way screens opening both ways. The observation room adjacent to the college room will have a movable wall so that the college room can be increased in floor space.

Health conference and health examination rooms are provided in the experimental section in order that physical checkups on the children in the classrooms may be made within the accepted framework of a school health program.

INDIVIDUAL STUDIES

Section No. 2 is an area for the researchers studying the effect of environments on children. Three special laboratories are provided for intensive individual studies of three major factors of an environment. One of these laboratories is a brightness laboratory in which children's response to brightness or light under various working conditions or brightness combinations can be studied intensively.

The second laboratory is a thermal laboratory in which temperature, humidity and air movement can be accurately controlled while subjects are performing various tasks.

The third laboratory is an anechoic laboratory where sound patterns can be controlled while subjects are performing tasks.

The area marked "research" in Section No. 2 is a planning center and office center for research workers assigned to the institute.

REMOTE OBSERVATION

In addition, the research area will contain the recording equipment for remote observation of research activities going on either in the experimental classrooms or in the special laboratories. This will include recording equipment for remote television operation and for light, sound, thermal and similar records. This recording equip-

ment will make it possible for continuous, permanent records to be made without the researcher's being present.

A shop area for instrument and demonstration equipment building is also provided in this section.

Section No. 3 is the administrative area for the institute. In addition to offices, it includes a reference center for periodic literature from all of the fields that are applicable to school planning and child development. A planning conference center is also provided, as well as darkrooms and other facilities needed to advance the program.

Secondary recording equipment will be located in the administrative center, such as television screens connected to the closed-circuit observation TV setup so that the administrative staff can keep in contact with research activities going on in the various rooms.

The planning room not only will be a conference and research control center but also will be provided with necessary statistical equipment for analysis of data obtained in the various studies.

DEMONSTRATION AREA

Section No. 4 contains a demonstration auditorium that can be divided into two large rooms with folding partitions. When the room is not in use as an auditorium, the front half of the demonstration area (to the left in the floor plan) can be used for small group meetings or for individual study of the various demonstrators or the scale model classroom.

The rear half of the auditorium can be used as a seminar area as well as a general reference area for visiting school administrators. The cabinets provided in the rear half of the auditorium are designed not only to hold books for general reference purposes but also to hold plans and models of schools.

The grand foyer is lighted and equipped for temporary exhibits during school planning conferences and short courses for school administrators.

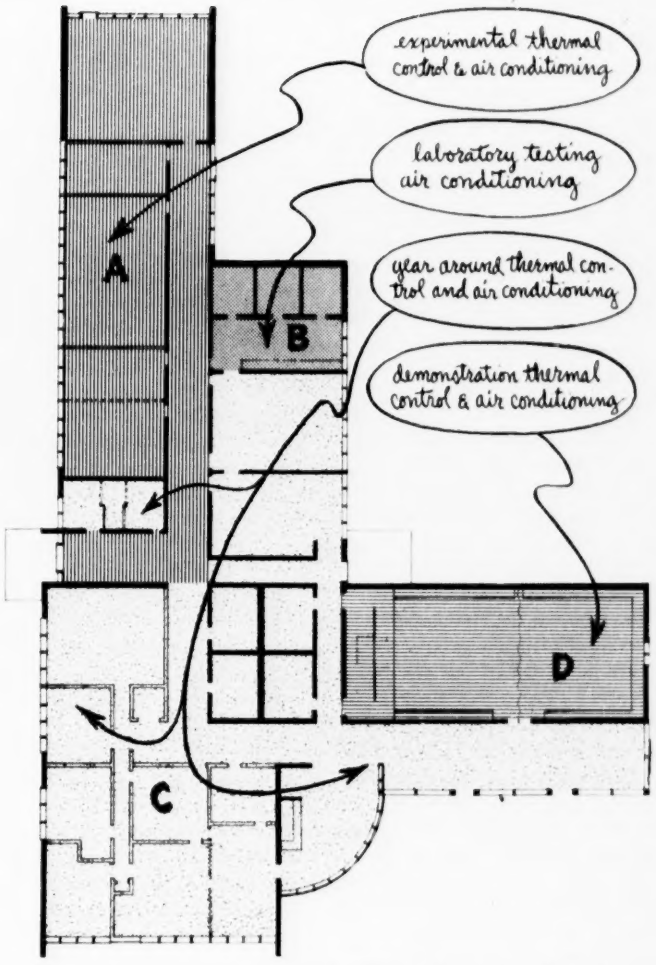
Heating and Ventilating System. The heating and ventilating installation is to be divided into four major systems, all of which are serviced by the main service of the university. However, they will be specialized and individually controlled for the various purposes of the different sections of the building.

The experimental classroom area, which will be handled from a tunnel outside of the building running the long way of the experimental area, is to be constructed so that various heating and ventilating as well as air conditioning systems can be installed in the experimental rooms as needed for testing.

This is the area with the vertical line shading, indicated by "A" on the accompanying plans.

The laboratory and recording area, marked "B" in the plans, will be equipped with a special year-round air conditioning system designed to give the needed rigid controls of heating, ventilating and humidity necessary both for experimental purposes and for maintenance of accuracy in the recording equipment and instrumentation.

The administrative area, as well as the foyer and research offices and shop, indicated by "C" in the drawing, will have a year-round air conditioning system of a conventional type.

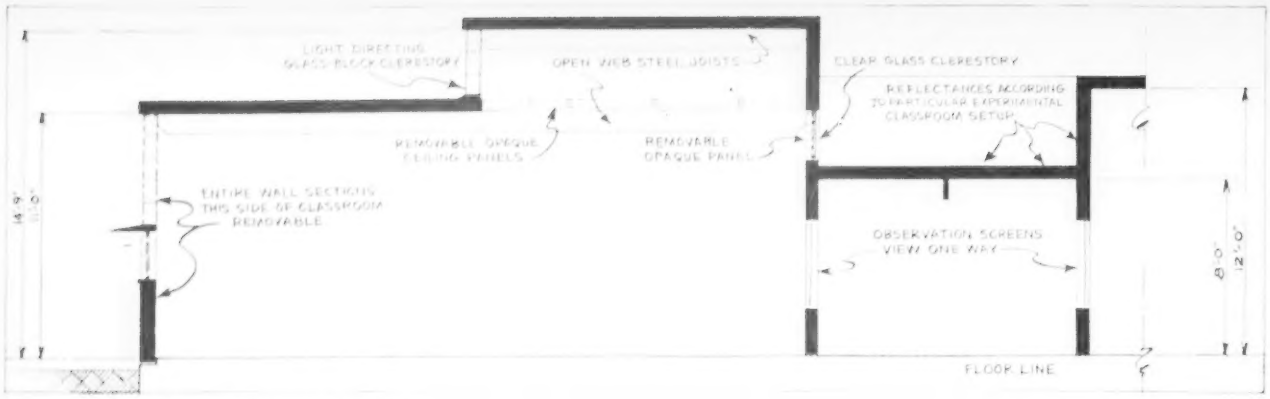


Four systems for heating and ventilating

In the demonstration auditorium, marked "D" in the accompanying drawings, the heating, ventilating and air conditioning system not only will be designed for the comfort of those attending meetings or doing other work in these sections but will have additional equipment making it possible to reproduce any thermal condition being discussed or demonstrated. That is, the ventilation can be altered rapidly and a similar alteration of heating —either to raise the temperature or to lower it—will also be possible, so that conference participants can experience any condition that might exist in a classroom while they are discussing such a condition.

PRIMARY CLASSROOM

The cross section shown (*p.* 76) is of the deep classroom, labeled "primary classroom" on the floor plan. This



Cross section of "primary classroom"

section shows the operating mechanisms for changing the room for various types of daylighting solutions.

This drawing shows the primary room equipped with a glass block window wall and light directing glass block in a unilateral clerestory. The glass block window wall with vision strip and hood is so mounted that it can be removed and replaced with other designs of fenestration.

A removable set of opaque ceiling panels can be inserted to make a continuous ceiling, the unilateral clerestory being cut off when low ceiling, deep room experiments are conducted.

Opposite the window wall is an opening that can be closed with opaque wall panels or opened for use in bilateral clerestory experiments. When used for bilateral lighting, this opening can be filled with clear glass, glass block, or other types of bilateral lighting controls.

The roof beyond the bilateral clerestory side is lowered, giving an outside area below the level of the opening in which various reflectors can be mounted to produce different types of outdoor lighting situations affecting bilateral clerestories. This lowered roof is over the observation area between the primary and the intermediate rooms.

Both the permanent ceiling section and the removable ceiling section in the primary room will contain electric sources permitting 50 watts per square foot, so that various types of artificial lighting can be set up for experimental purposes by means of direct attachment or through false ceilings hanging below the structural ceiling line. Only the structural ceiling line is shown in the accompanying drawing, and provision has been made for suspended ceilings at various heights below this line in order that experiments may be made with varied ceiling heights for different age levels and different lighting conditions.

AUDITORIUM

The accompanying drawing showing a section of the demonstration auditorium also shows the location of various activity centers in the room. The folding screen partition in the center of the room divides the room into a demonstration area and a seminar-conference room when it is not in use for large meetings.

The left side is the demonstration area and the right side is the seminar area when this partition is closed.

At the front of the demonstration room is a low, raised area for a demonstrator or lecturer. To the back of this low platform is a changeable scale model classroom (3 inches to a foot) recessed into the apparent front wall of the auditorium. Over the demonstrator's area is a luminous ceiling to give shadow-free lighting for any demonstrations he wishes to make in front of the model; the opening of the model classroom can be closed for lectures by use of sliding panels, which incorporate projection screens, tackboards and chalkboards, according to the need of the lecturer.

OPERATING DEMONSTRATORS

Behind the model classroom are access areas for moving demonstrator equipment in and out from the shop or storeroom.

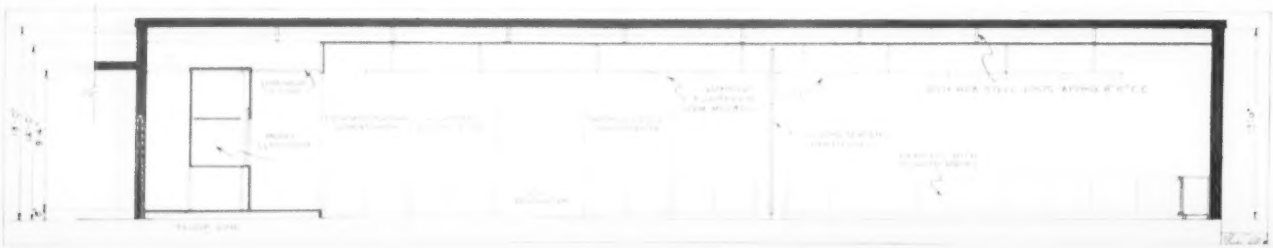
To each side of the demonstration area is a series of large operating demonstrators where individual points or principles can be demonstrated as they affect various aspects of the classroom.

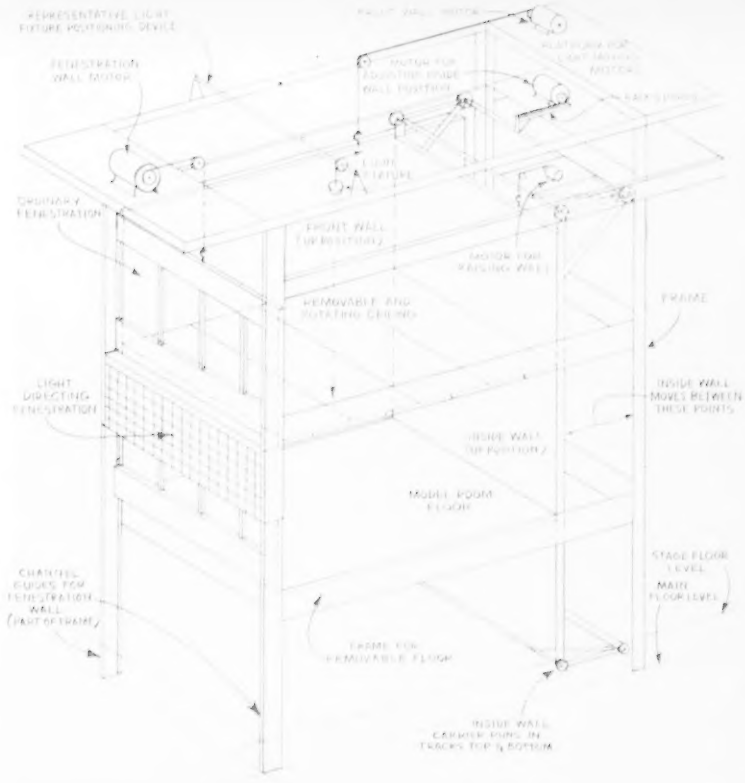
At one side is a magnetic planning board and miniature equipment where equipment layouts may be demonstrated. Adjacent to it is a chalkboard demonstrator, where the effects of chalkboard illumination and color and the acoustical effects of various chalkboard materials can be shown to groups.

Next is a demonstrator showing the principles of controlling the thermal environment. To the other side of the room are comparable demonstrators. One of these demonstrators can be used to show the principle of daylight; and various types of inserts from louvers to glass block can be set up to show the operation of various daylight controlled mechanisms.

Another is a demonstrator for color and wall finishes, showing the visual effect of various colors, their saturation, and their let-downs.

Cross section of demonstration auditorium





Controls for model classroom

Next is an artificial lighting demonstrator into which models of various types of artificial lighting equipment can be inserted and various distribution patterns of light demonstrated.

AUDIO-VISUAL

There is also a demonstrator of audio-visual equipment showing the effect of room design on the use of this equipment, as well as the effects of sound and light combined on the child and room.

Each of these demonstrators has appropriate measuring apparatus, the scales or indices of which can be projected on a screen at the front of the room. Each demonstration center will operate at exact scale, so that the principles involved can be accurately shown and various problem solutions within these areas can be accurately measured.

The lighting, thermal and other controls of the total room environment will be so set up on a control panel that the environment of the room can be altered to match the principles being shown by any demonstrator at any time.

The conference and seminar section at the left contains low cabinets to match the base of those in the demonstration area. These cabinets are constructed to hold and display reference material, such as books, periodicals, models of schools, and plans of schools, so that the room can be used for short courses, for single conferences, or for reference use by school administrators and others interested in school planning.

The tops of the cabinets will be constructed so that temporary demonstrations and displays can be set up to go along with the demonstrators at the front of the room whenever the total area is used as an auditorium.

Luminous indirect lighting will be used through the area, connected with a fluorescent dimming system so the light level can be changed to fit various uses of the auditorium area, from television and picture projection on to meetings, demonstrations and conferences.

MODEL CLASSROOM

The model classroom for demonstration purposes, located at the front of the auditorium, is so engineered that floors, walls and window sections can be changed at will. In fact, two model classrooms can be set up at one time for comparison purposes.

A remote controlled elevating system is included in this demonstrator, permitting comparison showing of two different types of windows in relation to one type of room design. Behind the window section will be an artificial sky, also remotely controlled, so that various orientations can be demonstrated as well as various altitudes and azimuths of the sun for different latitudes or different times of the year.

Each of the other walls also can be set up in the elevating system so that it can be changed independently of the other walls, in order that various color combinations or vertical teaching equipment can be demonstrated.

CHANGE SIZE AND SHAPE

In addition, the model room is so built that its ceiling height and width can be varied by remote control. The width can be changed all the way from a 24 foot wide room to a 32 foot wide room. And the ceiling height can be changed all the way from 9 feet above the floor to 12 feet above the floor. In addition, the ceiling can be elevated so that portions of it can be at different levels, and unilateral clerestory or bilateral lighting also can be introduced.

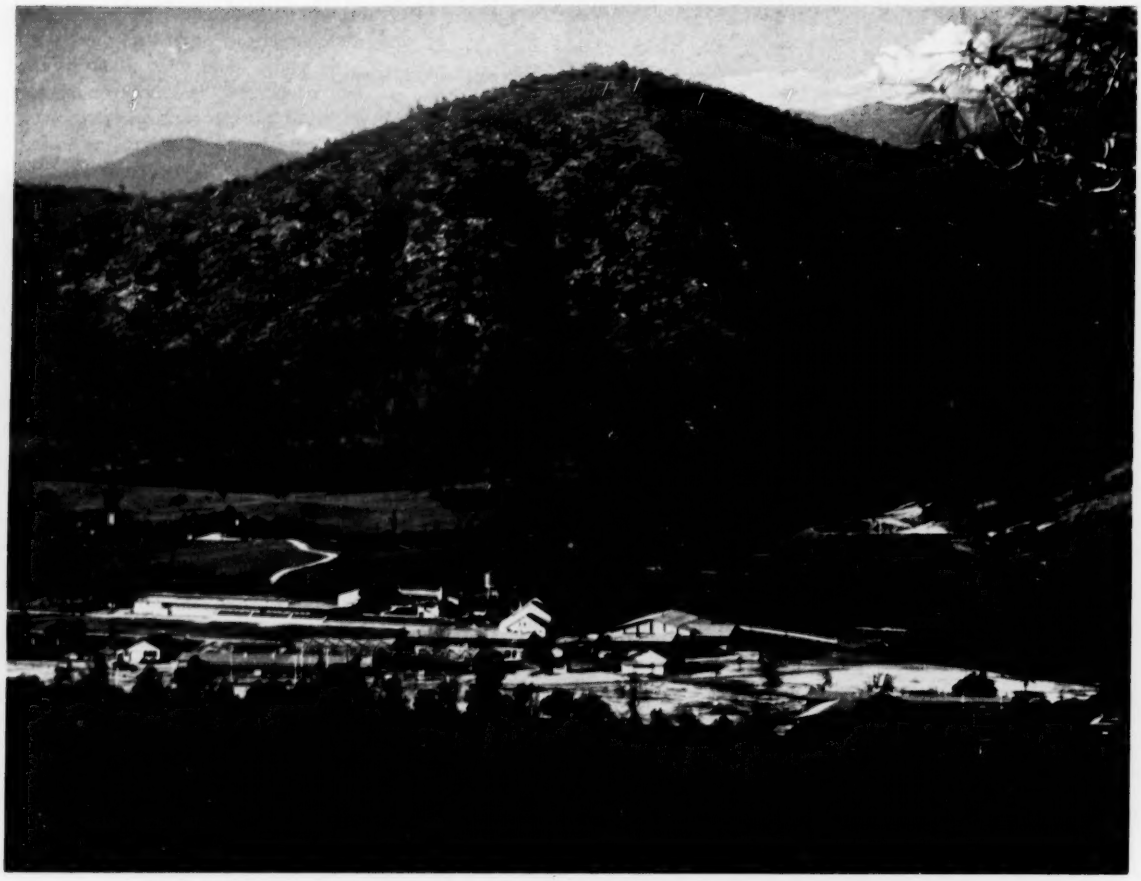
Above the ceiling line of the model will be a number of scaled lighting fixtures of different designs, such as louvered fluorescent, luminous indirect fluorescent, luminous indirect incandescent, concentric ring silver bowl incandescent, and the like.

Through a rotating system of openings in the ceiling, these various types of light fixtures can be dropped and suspended in the model room as needed to demonstrate various electric lighting methods.

Miniature furniture of various types will be available for various curricular approaches to room design.

REMOTE CONTROL

Each of the controls for elevating the walls, changing the light fixtures, or comparing one pre-set room with another, as well as all of the controls on the demonstrators located in other parts of the auditorium, will be operated through a relay bank leading to a small switching system on a demonstration desk; this will permit a lecturer or demonstrator, by remote control, to make all of the model classroom changes and to demonstrate each step of some principle without leaving his position in front of the group.



California's Sierra Joint Union High School. A 14 building construction program is nearing completion.

HIGH SCHOOL DORMITORY

serves mountainous California region

ENNIS NARDI
Accountant, Bureau of School Apportionments and Reports
Division of Public School Administration, California State Department of Education

DORMITORY schools in California, a state that last year spent more than $16,800,000 to operate 5400 buses for pupil transportation, are a rarity. Nevertheless, some California school districts confronted with difficult geographic conditions are supplementing regular bus transportation with year-round accommodations for their students. Such is the case of the Sierra Joint Union High School District located in the foothills in eastern Fresno and Madera counties.

Sierra's current enrollment of nearly 350 students is drawn from a region larger than the state of Delaware, consisting of forest land, mountains and steep ravines. The location of the school is so remote that *all* students, except those residing on campus, ride to school by bus each day. The nearest community, Auberry, is 9 miles away. Some students travel as far as 37 miles to school. Those who live beyond this distance or who are unable to reach their homes during the winter because of snow or poor road conditions are housed on the campus. Living quarters are available to them on a full residence basis for the entire school year or for shorter periods.

There were other factors besides widely spread area and rugged terrain that led to the erection of the dormitory. An increasing enrollment made it difficult for the school officials to find a sufficient number of private homes near the campus in which to lodge the boys and girls. Furthermore, having one attendance center offers the advantages of a better curriculum and over-all school program. Then, too, construction and operation costs of the dormitory were within the financial limits of the school district, especially since surveys had revealed that the cost of operating a dormitory would be less than the cost of lodgings in private homes. Most important, the entire program had parental backing. Thus in 1948 the structure was com-

pleted at a cost of $220,000, which was estimated to be about 20 per cent higher than prevailing costs elsewhere because of Sierra's remoteness. However, this extra cost proved no undue burden in view of the district's $60 million assessed valuation, which permitted all construction costs to be paid out of current revenues.

Since supervision of students is the main problem of any dormitory program, the architect, Alastair Simpson of Fresno, Calif., purposely designed a structural layout intended to lighten the task of supervisory personnel. This, in effect, was accomplished by combining three distinct living units in one, thereby affording essential isolation among boys, girls and adult groups while actually retaining maximum supervisory control of the students under one roof.

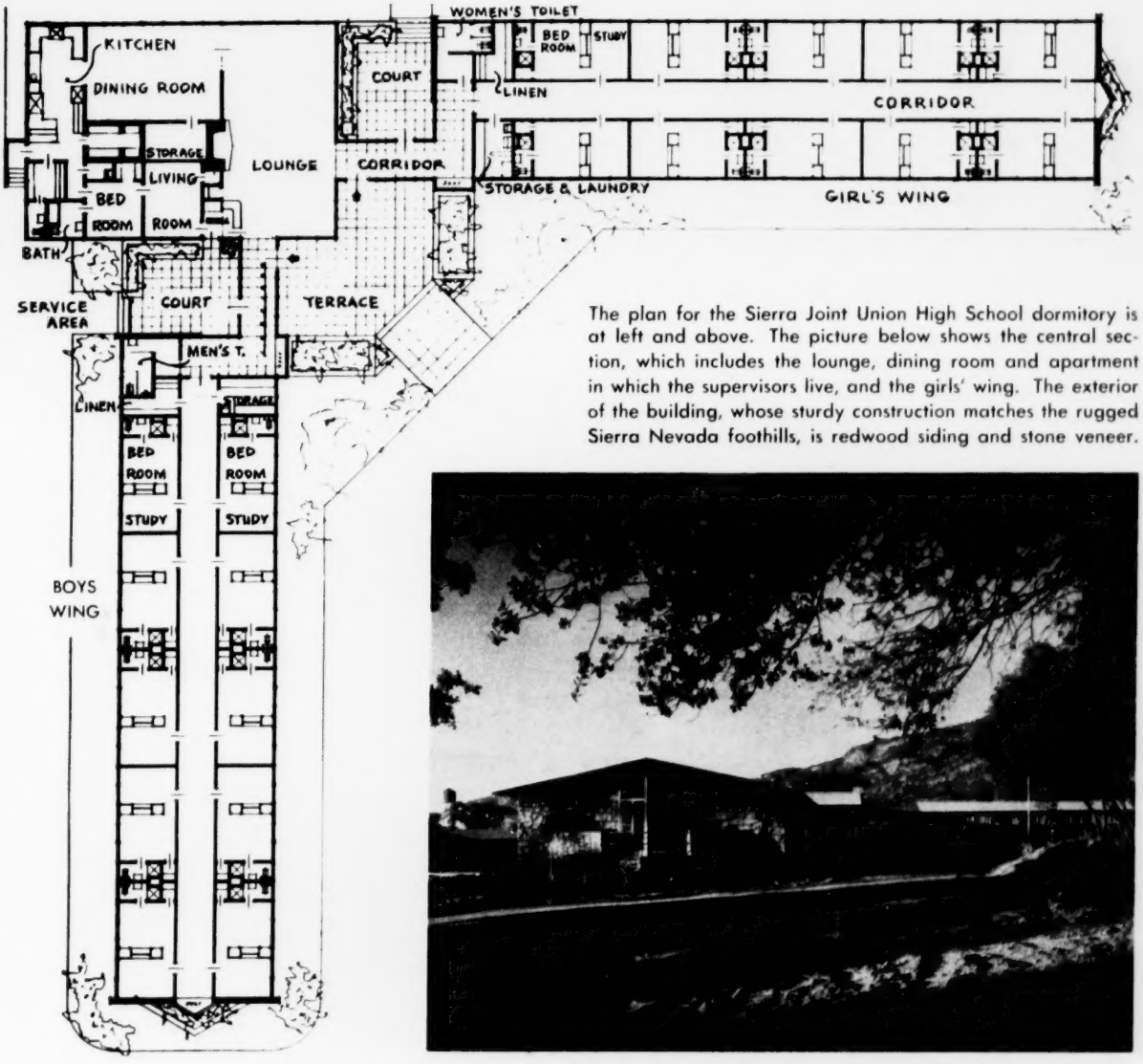
The dormitory is a low, L-shaped structure with 20 "bedroom and study" suites spread out along two wings. The wings, one for the boys and the other for the girls, are connected to a large central unit by glassed-in corridors.

CENTRAL UNIT

The central unit is composed of a lounge and a dining room for the students and the living quarters and an administrative office for the supervisor and his wife. The unit is set off in front by a wide terrace and on two sides by shelter courts for easy access to the dormitory from the rear. The terrace, brightened with pavement of colored cement, is flanked by planting boxes usually filled with gaily colored flowers.

The exterior finish is redwood siding and trim of native stone veneer ideally suited to the rough mountain setting. The interior woodwork is Douglas fir in soft stain and wax finish, and ceilings are of fiberboard tile. The entire building is heated by a radiant heating system.

Each suite accommodates two students and contains a study, a bedroom, and a bathroom with stall shower. Private bathroom facilities were installed to provide students not only with the comforts of home but also with the responsibility of keeping their own bathroom facilities clean. Each suite has a built-in study table and a wardrobe cabinet. Floors are



The plan for the Sierra Joint Union High School dormitory is at left and above. The picture below shows the central section, which includes the lounge, dining room and apartment in which the supervisors live, and the girls' wing. The exterior of the building, whose sturdy construction matches the rugged Sierra Nevada foothills, is redwood siding and stone veneer.

dark green asphalt tile; the bathroom floor is covered with linoleum.

The wardrobe cabinet, 6 feet 6½ inches high and 9 feet long, is a partition between the bedroom and the study. In the bedroom, the cabinet center contains a large plate glass mirror placed above two sets of drawers with concealed drawer pulls. Closets with adjustable shelves are located on either side of the mirror and drawer sets. In the study, the reverse side of the wardrobe cabinet serves as a bookcase.

CONGENIAL ATMOSPHERE CREATED

The lounge (44 by 24 feet) and the adjoining dining room (28 by 20 feet) have pitched beam ceilings that help give a feeling of roominess. In the lounge casual furniture aptly lends itself to social and recreational activities. The fireplace of reinforced concrete veneered with stone trim helps create a congenial atmosphere for students during the cold winter evenings. The kitchen features an unusually large walk-in cold box with a specially designed frozen food compartment.

The supervisors' compact apartment, consisting of living room, bedroom, bathroom and private office, is centrally located, with immediate access to the lounge and kitchen.

Supervision of the students is a 24 hour job. It presents a constant challenge to maintain the delicate balance between providing a homelike atmosphere on one hand and retaining a certain amount of necessary discipline on the other. To maintain this delicate balance it is necessary to have (1) a purposely designed building, as mentioned previously, (2) competent supervisory personnel, (3) a free-time recreation program, (4) well defined rules and regulations, and (5) cooperation of students' parents.

Leland T. Cook, the district superintendent and principal, is now in his sixth year at Sierra Joint Union High School. Vice principal is Clifford Frantz. A married couple supervises the dormitory.

The free-time recreational program is under the direction of a teacher employed at an hourly rate to conduct and organize recreational activities and to be on hand during the "free night" scheduled for the middle of the week, usually Wednesday night.

SUBSCRIBE TO REGULATIONS

In order to make discipline more effective students and their parents must subscribe to dormitory regulations before any boy or girl is accepted. Any changes in rules, regulations or procedures are communicated immediately to the parents for their written approval.

Confinement to rooms in the evening is the usual punishment for ordinary infractions of rules. Study hours are between 8 p.m. and 10 p.m., with interroom visiting within the boys' wing and the girls' wing only upon

The terrace is flanked by planting boxes usually filled with gaily colored flowers. It provides a social and recreational area for the students.





ABOVE: The fireplace is the focal point of the attractive lounge. BELOW: A piece of furniture, wardrobe on one side and bookcase on the other, partitions each of the suites into a study and a bedroom-bathroom unit.



the approval of the supervisors. Students clean their own rooms, which are subject to daily inspection, and are assigned other duties for dormitory maintenance and meal service as well.

Parents are free to lodge their children elsewhere, but in view of the low rates at Sierra they never do. The charge per student of $6 a week includes bedding, linen and towels, laundry service for these items, and meals. This amount is slightly less than half the actual cost.

Accommodations are limited to students whose parents are bona fide residents of the school district. Tourists, having discovered Sierra's wonderful facilities, have unsuccessfully sought to be eligible to send their children to Sierra by simply becoming property owners in the area. Many other requests, especially from widowed mothers who for reasons of hardship or health would like to have their children at Sierra on a full-time basis, have had to be refused because of this restriction by the school district.

In the daily drama of public school life—



A Business Officer Has Four

THE important and tremendous business of public education does not and cannot run by itself. Any business must be properly administered if it is to return to its founders and stockholders the dividends they expect in money and in service. Schools are no exception to this kind of expectation. The proper administration of schools is as important as the proper administration of any private business.

The expectations of an informed citizenry demand of those of us engaged in school administration more significant and far reaching accomplishments. In accomplishing these results we must look after hundreds of details. These details, although not the end product in themselves, are as important in their accomplishment as is the end product.

School administration does not exist for itself or to provide jobs for a certain number of people but rather to provide adequate and good schools. School administration exists only for the pupil, and its efficacy must be measured by the degree to which it facilitates the teaching and learning experiences.

The fact that a complicated and rather extensive organization of school administrators now exists is not entirely an accident. It is the product of a gradual and significant growth in public education in the United States. In the early days when society was much less complex, when the needs for education were not so great or so broad as they are today, education was a smaller and less complicated enterprise. In those early days only teachers existed as employes of school committees. Schools were administered directly by the people who met regularly in town meetings and decided, after public discussion, what decisions were in the best interests of the particular communities.

Here, it is true, pure democracy was in operation. But it is also true that here were schools which operated only on a part-time basis and were not so broad in their scope or so deep in their significance as schools have come to be in later years.

It was not until 1826 that the first state law required every town in the state to elect a school committee. It is in the school boards which have resulted from that original directive that the most nearly true democratic machinery in our everyday life has continued to exist. It was these early school boards that next found it expeditious and prudent, to employ a school administrator to oversee and carry on the multitude of activities associated with their school programs.

The position of superintendent of schools, of the first school business official, came into being in 1836, when the first city superintendency was established in Providence, R.I. To this school business official school boards gradually delegated functions of a ministerial nature, and our forerunner began to move into the center of the picture. Today, as we well know, the school system of every state, county, parish, city, town and village has a superintendent and other business and educational employes who are charged with administering the policies established by school boards.

School administration today has become a profession in the true sense of the word. At the same time it has become a complex and sometimes confusing field of endeavor for women and men.

The school systems — nationwide — which it is our responsibility to administer are complex in their operation and significant and far reaching in their implications. A quick rundown of the topics which the Southeastern Association of School Business Officials considered in its two and a half day meeting here in New Orleans, April 8 to 10, is full proof of the complexity of the responsibility which is ours. Among those topics were: schoolhouse planning and construction, transportation of pupils and supplies, maintenance and operation of school plants, and the entire field of purchasing, together with specifications and laboratory testing procedures. These very topics would have been foreign, indeed, to the school administrator in any meeting 50 years ago.

The very fact that our enterprise is so far reaching demands of those engaged in the field peculiar and unusual competencies unheard of but a short time ago. A more detailed listing of the various fields of interest would be found in any standard textbook in school administration. Let's run down the table of contents in one of the more or less standard textbooks. We find such subjects as sound business procedures; selection, purchase and distribution of supplies; control and planning of income; plans and procedures in general control; instructional services; plant operation; plant maintenance; problems incurred in fixed charges; problems of capital outlay, and problems involved in auxiliary services.

However, I see the rôle of the school business official from some more poetic and interesting angles. First, I should be quick to define "school business official" as an all-inclusive term. I see not only the business manager, the director of purchases, the chief clerk, the director of transportation, the superintendent of maintenance, and the supervisor of custodial services as school business officials but also the school superintendent in his relationship with each of these men. In defining the job of the school business official, therefore, I have picked four particular rôles which I see as his. First, I would list the rôle of the school business official in the

Adapted from an address to the Southeastern Association of School Business Officials, New Orleans, April 8.

more prosaic and well understood terms of the pure and simple business procedures to help ensure economic and efficient operation of a school system. In accomplishing this rôle, he has a number of specific responsibilities. Among those that might well be listed are the following:

1. To establish a proper accounting system.
2. To establish a budgetary procedure and adequate budgetary controls.
3. To provide for proper property inventories.
4. To insist upon adequate auditing procedures.
5. To provide for bonding all school officials.
6. To safeguard school deposits.
7. To instigate and supervise a proper and adequate pay-roll procedure.

JAMES F. REDMOND
Superintendent of Schools, New Orleans

Rôles to Play

8. To invest school district funds prudently and with financial foresight.
9. To establish efficient office procedures for the school system.

These I admit to be the more prosaic but nonetheless more commonly accepted rôles of the school business official. Important, yes, and significant to sound public opinion concerning the adequacy of the administration of any school system. It is my belief that this responsibility for establishing sound business procedures is first and foremost among the rôles which a school business official must undertake in playing his rôle in today's educational picture.

Second among the rôles which the school business official should play is one that will be recognized by all as a most significant one. This rôle is to "facilitate the instructional process." In this particular rôle the school business official has as his possibly uninspiring yet all-important responsibility the provision of school housing; the comforts of heat, light and ventilation that go along with good school housing; the provision of tools and materials of instruction and the many details connected therewith; the provision for pay of teachers and other school employes; the making of repairs and remodeling of school physical plants; the provision of transportation for pupils, and the adequate provision for food service and supplies—in short, for keeping the plant clean and sanitary and in a condition to be operated by the instructional staff for the welfare and the health of the students at all times.

There is yet a third rôle which I visualize for the school business official. This rôle I consider something larger and more significant than either of the first two I have mentioned. In this area he plays a major part in the actual instructional program carried on by the school system in which he finds his employment. In the third rôle of participation in determining school policy, I see four specific activities which the school business official has an enviable opportunity to contribute to and enlarge upon.

First among these activities is the participation with other staff members in making basic decisions which affect the instructional program. These decisions affect not only the instructional program but community relations and interstaff relations as well. It is in this rôle of helping to determine the feasibility of a particular line of action suggested by instructional staff members because of monetary, spatial or equipment limitations that the school business official actually determines what is happening to the girls and boys that are in our care.

The second of the activities which this third rôle emphasizes is the opportunity the school business official has to interpret the program in his many contacts throughout the community. In his contacts with salesmen, real estate brokers, bankers, bond buyers, and service personnel of all kinds—often the only contacts these men have with the schools—the school business official has the unique opportunity, which he cannot share with other members of the school staff, of being the spokesman and representative of a modern educational program.

The third opportunity for the school business official to participate as a member of a policy determining group is through his work with parent groups, with lay advisory groups. In New Orleans our business manager, our supervisor of transportation, our superintendent of maintenance, and our director of food services have had opportunities during the last year to participate with lay advisory groups in determining actual school policy and rules of operation and procedure. It is in this way that the modern, far seeing school business official has a unique opportunity to help plan and carry into action school activities within his area of influence.

The fourth area concerns the intimate contact that the school business official has in most states with legislators. It is altogether fitting, that, for the main part, legislators are most interested in the financial aspects of school administration. It is therefore realistically the opportunity of the school business official to work with these all-important members of our communities in helping to determine the very life of the enterprise in which we are engaged.

TEAM APPROACH IS BEST

The fourth and probably most significant rôle I see for the school business official is to work with his school superintendent to interpret with him the operation of the entire educational enterprise to and for the board of education for which they both are working. It is true, and must always continue to be true, that the school board determines school policy. After that policy has been determined, however, it is the responsibility of the school administrator and his associates, including the business official, to put that policy into action.

I hasten to elaborate upon that term to describe it more characteristically as a team approach. The participation of the school business official in a unit system of administration as a member of a team may seem painful to you, may at times seem slow, but in the long run we know it is better, it is safer, it is more lasting. The school business official brings to the team the peculiar talents and capabilities in the field of business which are his and in the team discussion finds opportunity to advise, suggest and compromise with educational and instructional aims and objectives so that a well balanced program, with the well-being of the girl and boy at heart, may be presented to the school board for ultimate action.

CHALK DUST



JUNE

The tides of wisdom ebb and flow . . . the waves of fortune undulate . . . the great decision, con or pro: shall Johnnie graduate? . . . for who can judge futurity . . . or fully ken the whims of fate . . . and here stand I and there stands he . . . and who will graduate? . . . for who can know as years go by . . . which may be bad or may be best . . . for here stands John and there stand I . . . and who has failed the test?

« »

THE FACE OF JUNE

BECAUSE OF occupational hazards, no school administrator looks the same in June as he does during the more normal months of the year. For that matter, all photographs of school superintendents are vastly misleading, and why they are ever published at all is a great mystery. In the first place, they portray the school head as he wishes he might be. They are usually snapped before he gets his first position, during a period when the receding hairline, the haunted eyes, and the worried brow are in the years which lie ahead. No superintendent in his right mind would sit for a portrait after he has been superintendent a few years because he wouldn't dare face it. So he gets the old college photograph retouched and slicked up to send forth with multitudinous job applications. But nobody is fooled, unless it is the local newspaper.

Particularly in June does the wise school superintendent dodge the camera. For June is the ulcerative month of final examinations, skewed schedules, sheep-and-goat separations, belligerent parents, postmortems, futile arguments, overlong commencements, and nervous breakdowns. June is the month of the furrowed forehead, the harassed countenance, the homicidal sneer, the maniacal grin, and the ophthalmologic eyes. In a word, in June the superintendent is not at his best.

However, when the obstacle course has been run, when the last wriggle under the fence has been wriggled, when the highest hurdle has been cleared, when the final diploma has been dropped, and the bawlingest infant has been removed from the arena, when the guest speaker has run out of gas, if ever he had any, only then can the superintendent relax and smile for the birdie.

If you must absolutely preserve your battered physiognomy for posterity to grin at, sir, wait until July. June is no month to face it; there is too much else to face!

« »

AUTOBIOGRAPHICAL

COMMENCEMENT TIME in Cattaraugus County, in those dear days when I was finally graduated from high school with an unsigned diploma and sighs of relief from the faculty, was really An Important Event. Including the Class Play, it lasted four days and nights, not counting the Alumni Banquet. Although my class of 14 was greatly outnumbered by the audience of aunts, uncles and second cousins, we made a brave showing with our bright new dresses (the girls) and freshly pressed ice cream trousers (the rest of us). Prof, himself, delivered his usual commencement homily, telling about the door labeled "Push" and "Pull" and emphasizing that a little extra push wouldn't hurt any of us. Inasmuch as I had received a dozen Alger books as commencement gifts, I took the lesson thoroughly to heart.

Cora read the Class Prophecy, which, because it predicted complete success for all, was well received. The Class Will, which dealt with community idiosyncrasies, was humorous, although maybe a mite too personal. I was allowed to present the Honor Oration because Father was editor of the local paper, and it was generally understood that he would write the oration for me. There were no slip-ups during the Exercises, for the class had been drilled in marching tactics by Prof for the preceding six months. Eventually, every one of us received an outsized beribboned diploma suitable for framing.

Looking back nostalgically, it seems to me that the pomp and color of school commencements have largely disappeared, and it may be that our public relations folk have added too many gimmicks. The big name speaker has been supplemented by a pageant, which often is more tedious than he himself ever was. The graduates are draped in prison drab at so much per drape; the home economics department now baby-sits members of the youngest generation, who in the old days were always responsible for a few welcome laughs. The impressive diplomas have become little scraps of paper to be scattered around by the hundred and discarded forthwith. We have streamlined the whole ceremony so the folks can hurry home to see the fights on television!

Maybe these are the maudlin recollections of one who really was given the business, but sometimes I think the schools of that benighted era did a better public relations job than they wotted.

At least all of my relatives, who had never even heard of continuous pupil progress, were agreed that my five years in high school had been well spent.

« »

THE SUPERVISOR

Beware the supervisor who
Delays and temporizes
Until he finds so much to do
He never supervises!

Students take lead in

Clean-Up Campaign

in the schools and in the town of Ferndale, Mich.

HEY, Pop, don't you think we'd better fix up our yard this spring?"

When Junior asks the question, Dad is shamed out of his mental hammock and into his work clothes.

The question is being asked plenty of times in Ferndale, Mich., where 9500 public and parochial school children are helping make "clean up, paint up, fix up" a year-long community proposition.

Students are the backbone of a city-wide improvement campaign that got rolling in April and will climax next September with a program of merit awards for the most beauty conscious residential blocks, industries and businesses in town.

Youngsters have set the theme of the clean-up campaign through a slogan contest in which there were hundreds of entries.

Art classes were busy in April preparing posters that were placed in business windows to make the community clean-up conscious.

The effect of slums on the economic and social well-being of a city is typical of the class discussions and essay topics for older Ferndale students.



Ferndale High School students do their part in the community clean-up campaign by removing debris from the high school parking lot. A special student patrol is charged with keeping the lot clean all year around.

KEEP HALLS, YARDS NEAT

The youngsters' part is not limited to the schoolroom. Junior-sized sanitation officers in grade schools are taking responsibility for seeing that fellow pupils keep school yards and halls neat and free of trash.

Boy scout troops from schools and churches are conducting a block canvass of the town. At each home they politely ask the owner just what he plans to do in the way of cleaning up —"plant a garden, Mister, fix up the yard, paint the outside of your house?" Promised improvements are jotted down carefully and checked upon later. Blocks that score more than 80 per cent cooperation will be cited for their work next September.

Armed with trash cans and rakes, girl scout troops are scouring vacant lots that have become eyesores from debris left by careless passers-by.

Young people will help adult volunteers contact all businesses and industries to extract pledges to join the clean-up campaign.

This Arbor Day was a busy one in Ferndale. A parade with cars from local agencies, a fire engine, and a department of public works truck stopped at each of the schools. There was a tree-planting ceremony and a brief speech by a pupil on the topic: "What Clean Up Means to Me."

During summer months, the public will be urged to paint up. Prizes will be offered for the best before-after results on individual homes.

Exchange of plants and shrubs, clean up of city buildings and parks, new sidewalks and paving, extermination of insects and vermin, elimination of fire hazards, better enforcement of traffic, health and dog ordinances—all are ways the Detroit suburb hopes to improve itself.

City, school and civic leaders who have united behind the drive for a more attractive city believe the enthusiasm sprouted by children in school will be carried right into their homes.

"If you sell the idea to the youngsters, you've sold it to the parents," believes James H. Fitch, a Ferndale parent who is chairman of the clean-up program. "Through their help, we hope clean-up efforts will continue for not just one week of the year, but all year round."

YOUNGSTERS BENEFIT

School officials see benefits for the youngsters from taking an active rôle in bettering their community.

Ferndale planners borrowed some ideas from the National Clean Up, Paint Up, Fix Up Bureau, others from successful campaigns conducted in other cities.

School children have had rôles of varying importance in clean-up programs in 5500 cities throughout the nation.—*Reported by* ANN BRUNNER, *Royal Oak, Mich.*

Superintendents Say "No" to Prekindergarten Classes

SCHOOL administrators in 1954 are no more convinced than Athenians were in the Fourth Century B.C. that the state, through its public school system, should assume responsibility for the education of its very young.

Plato advocated it in about 380 B.C. and other voices have been raised in support ever since. But two-thirds of the nation's school administrators, according to a random sampling conducted by THE NATION'S SCHOOLS, oppose prekindergarten classes maintained by the local public school system. This extension of public school service downward one year (or two years) is opposed for a number of reasons.

NEED HOME ATMOSPHERE

The reason most frequently given runs something like this: "A home atmosphere is needed for preschool children; they develop rapidly enough in our first grade with the modern equipment and good teaching we have. Modern elementary schools are able to give the child an adequate grasp of study material as well as social conduct early enough."

This feeling was expressed in many ways, including this cogent comment, "We baby-sit enough now without including the cradle brigade." Philosophically, many school administrators simply believe that this kind of program is going beyond the realm of public education and the responsibility of the state's public schools. The best teachers of all in the early years, they maintain, are the child's own parents.

Another reason for opposition is given by the Oregon superintendent who insists that he can see a correlation between discipline problems and lack of close parental supervision.

Some, not many, returned questionnaires say that parent groups in communities are beginning to push the schools to accept this responsibility for nursery and prekindergarten classes, particularly for working mothers. One Pennsylvania superintendent calls this a "widespread move" and advises schoolmen that it should be vigorously opposed.

The 33 per cent of the administrators who favor nursery or prekindergarten classes do so largely on the assumption that if such training is desired by parents it should naturally fall under the auspices of the public school system. As the National Association for Nursery Education was told recently, the nursery school movement is "growing like Topsy." Some school administrators, then, assume that this is a matter for determination through public policy and, if our current social scene demands it, the schools should provide the program.

Another reason is given by the superintendent who said, "Prekindergarten classes would give a child a better opportunity to maintain health and achieve more easily what is expected of him later. I would strongly urge physical and dental examinations in these classes. Public opinion toward schools would improve, too, since there is no better way of building public support than by giving the public good service as soon as possible." Soon, apparently, means early in life.

The prevailing opinion of even those who favor prekindergarten is that, under our present serious financial strain, the schools are highly unlikely to be able to find enough money to extend their programs in this direction. The community which decides in favor of this type of program will, they say, have to raise the school ante way up from where it is now.

REQUEST FOR NURSERY PROGRAM

Of those who favor classes of this type, about six out of 10 would do so through complete financing by the school district, with the remaining 40 per cent favoring a program of partial financial support by the school district, such as furnishing physical facilities or one-half of the teachers. The majority on this question points out that, if the program is worth while at all, it is worth providing at complete public expense rather than requiring the parent to bear some costs. In many cases, they say, the requests for this type of program come from homes where both parents are employed full time outside the home.

And how many nursery or prekindergarten classes are there? According to the sampling of this poll, in only 7 per cent of the school districts of the country. Many of these involve only a few children in such programs as day care and nurseries in conjunction with high school and junior college homemaking departments.

Some communities are hearing a lot these days about nursery schools, but we have a long way to go before we reach any kind of general acceptance of this phase of education, and superintendents are not convinced we want to move in that direction, anyway.

Do you favor nursery or prekindergarten classes maintained by the local public school system?

Yes ..... 33% No 67%

If yes, do you believe such classes should be financed

Completely by the school district? Yes 59%

or

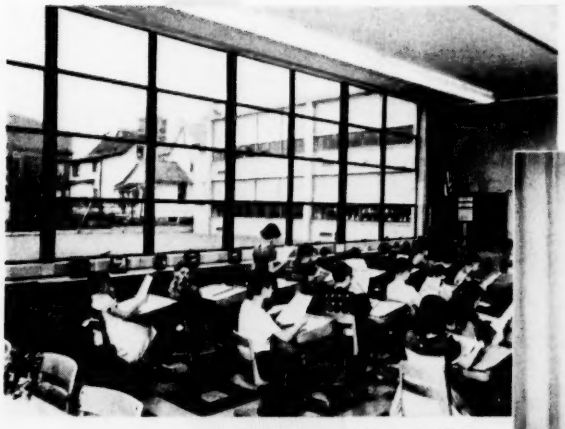
Partially by the school district (such as physical facilities, one-half salary for the teacher)? Yes 41%

Does your school system now provide such a program in your community?

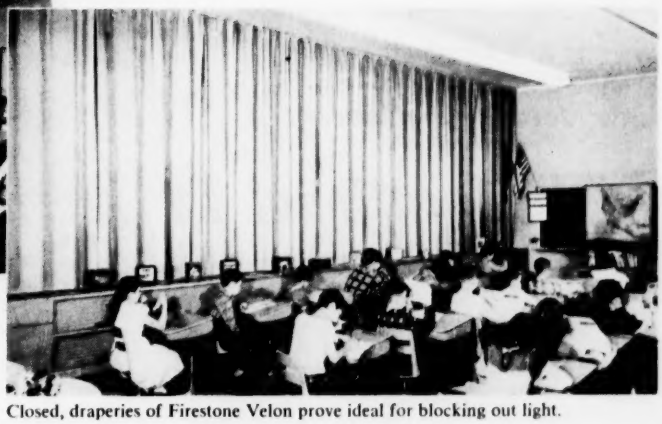
Yes ..... 7% No 93%

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Draperies of Firestone Velon are shown open, permitting light to flow through the windows in this Dueber School classroom.



Closed, draperies of Firestone Velon prove ideal for blocking out light.

In the modern Dueber School of Canton, Ohio, a number of classrooms boast an entire wall-of-windows for maximum light and air. Yet, when movies or slides are shown, students needn't stir from their desks! Thanks to pull draperies of Firestone *Velon*, light can be shut out completely, at minimum cost.

Here's why *Velon* . . . the attractive, superior plastic... gives more modern advantages than any type of material ever used before:

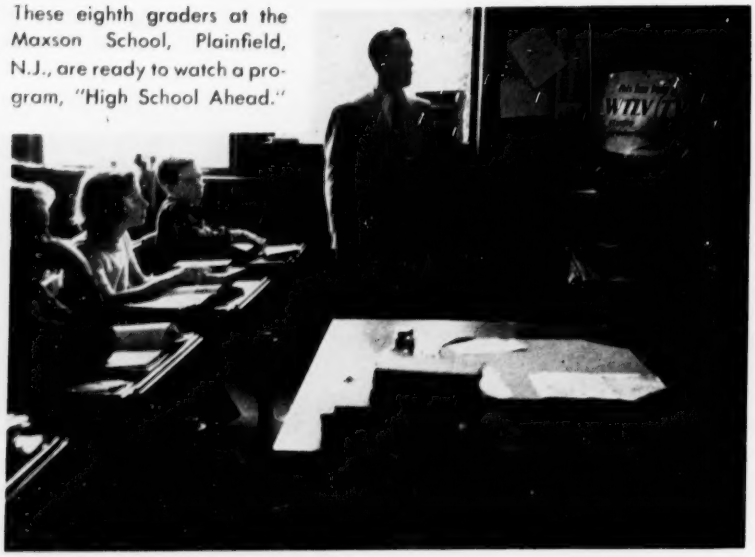
- **Light can be controlled to desired degree through pattern and color choice. Varying degrees of opacity available, suitable for classroom or stage.**
- Fade-resistant. Waterproof!
- **Fire-resistant. Approved for use in public assembly by authorities such as the New York Fire Board.**
- Easy to maintain. Unlike old fashioned dust-catchers, *Velon* needn't be dry cleaned and stored during the summer. A soapy cloth wipes away spots.
- **Durable. Gives long, faithful service under normal conditions.**
- Economical–costs less than venetian blinds, many conventional fabrics. Needs no hemming, lining, costly built-in fixtures.
- **Attractive decorator colors and patterns. Smart, fabric-like textures.**

If you are considering replacement of outmoded materials, or are about to install draperies in a new school, you'll find it pays to specify Firestone *Velon*. Ask your stage drapery and equipment supplier, or write to Firestone Plastics Company, Flex Division, Pottstown, Pa., for full information.



Draperies of Firestone Velon installed for the Dueber School of Canton, Ohio, by Janson Industries, same city.

Firestone does not make draperies or curtains... only the Velon material itself.



These eighth graders at the Maxson School, Plainfield, N.J., are ready to watch a program, "High School Ahead."

AUDIO-VIDEO

New Jersey has learned

How Educational TV Works

WILLIAM H. KING
Coordinator, Audio-Visual Education
New Jersey State Department of Education

EDUCATIONAL television has been a reality in New Jersey for almost two years. School administrators who are wondering about what kind of programs to plan, what kind of viewing equipment is necessary, and other problems of television in the classroom can look to New Jersey for an account of how it actually works.

Some of the happenings in educational TV during the two years of experimentation were good, and some were bad. We can offer suggestions which may help others avoid the mistakes that were made by the New Jersey group.

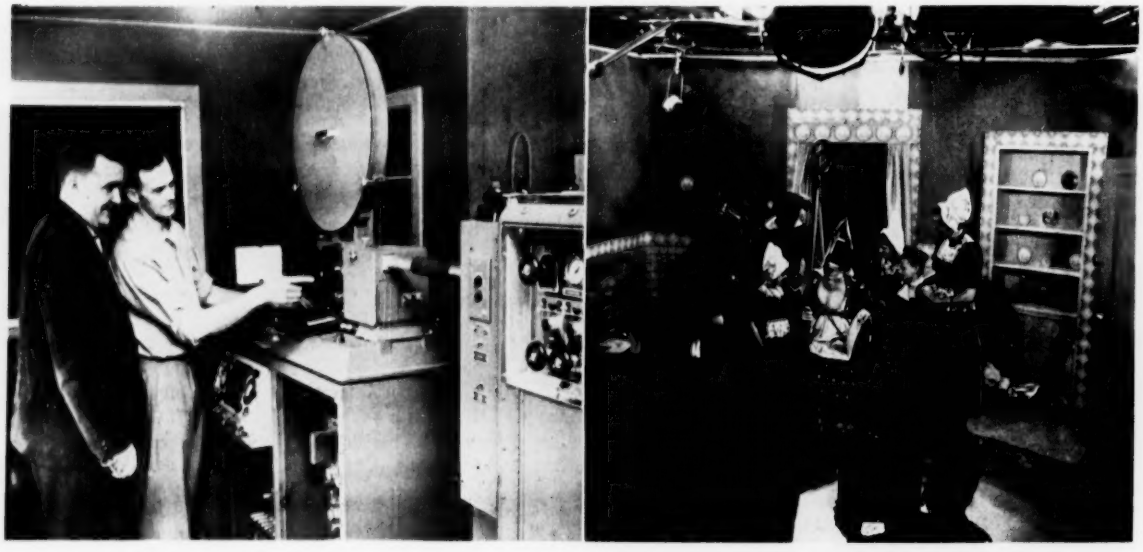
The New Jersey State Department of Education, at the request of the New Jersey Commission on Educational Television, was asked to devote most of its energy to experimenting with the use of TV as a teaching tool. Experimentation took place on all grade levels.

We attempted to establish two criteria by which to judge whether specific programs were worth while:

1. Can the proposed program be used as part of regular classroom teaching?

2. Can the program content be taught as well, or better, by TV as by any other teaching method?

We also felt that it was most important that program ideas and the method of presentation be determined by the classroom teachers themselves, rather than by the department of education. This would avoid the old cry of "state domination" of education and would make the teachers feel that, through TV, the department was attempting to perform a service rather than to dictate any educational policy.



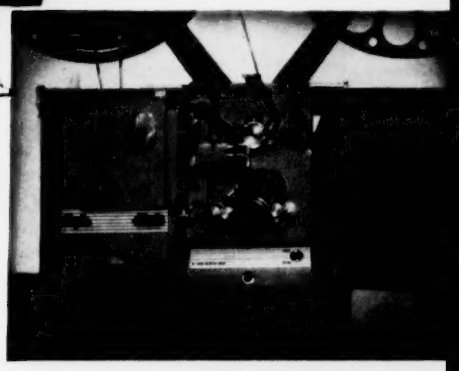
LEFT: This video recorder and rapid processing machine records television programs on 16 mm. film for later rebroadcast. RIGHT: This program showed how holidays (here St. Nicholas Eve in Holland) are celebrated overseas.

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(With finger-tip control panel, softly illuminated)

Start motor
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3 EASIEST ON YOUR FILMS — 3-SPOT SAFETY FILM TRIPS

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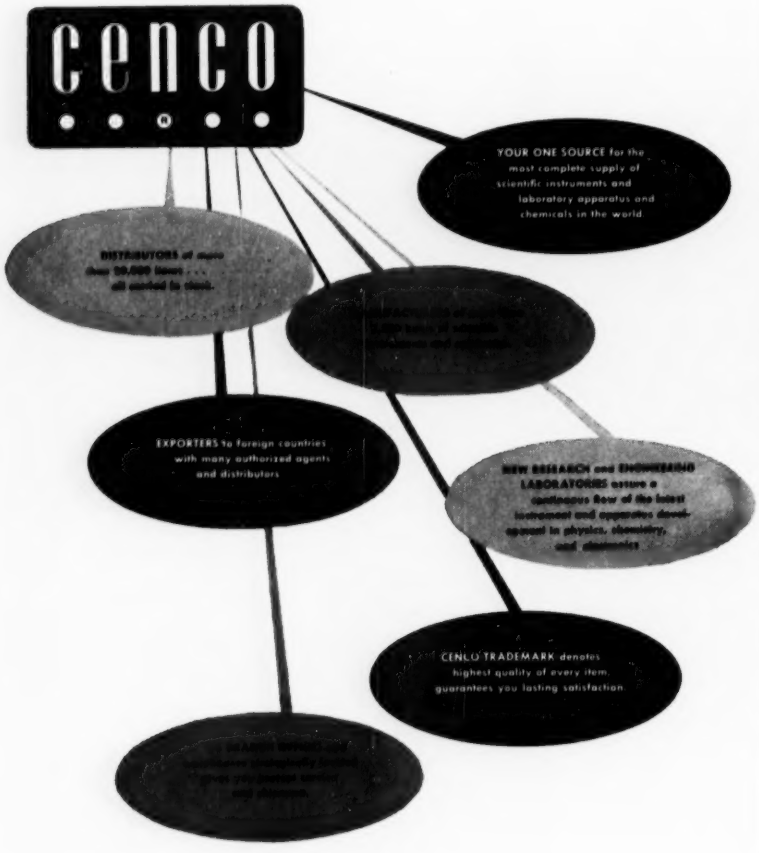
QUALITY MOTION PICTURE EQUIPMENT SINCE 1910

Because we did not actually have a transmitter on the air and because we planned to rent closed-circuit facilities, we selected two communities, New Brunswick and Highland Park, close to our studio for our initial experiment. In each of these communities a high school and an elementary school were selected to receive our programs.

A teacher committee of 48 was selected from the two school systems by the school administrators. These teachers worked with our TV staff to formulate television programs. Our programming was on all grade levels from kindergarten through high school. Program ideas originated with this teacher committee but were developed into TV scripts by staff members of the Television Research Project. It is important to emphasize, again, that our staff members were responsible for making the best TV programs possible out of the program ideas presented by the teachers. The teachers decided *what* they wanted taught and *how* they wanted it taught.

Because of the feeling that TV is a classroom teaching tool, TV receivers were located in the classrooms rather than in auditoriums or other special rooms. As far as possible, plans were made so that the classroom teacher would use TV as she would use any other teaching aid. The 30 TV receivers used for this experiment were provided either by local dealers or by the department of education.

In order to help the classroom teacher make the best possible use of these TV programs, teacher guides were prepared and sent to the teachers in advance of the program. These guides contained not only the program content but also suggestions for introducing the TV program and suggested follow-up activities after the program was off the air. Teachers felt that these teacher guides were an essential part of any educational TV programming.



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PROBLEMS APPEARED

A number of problems quickly became evident. Without a TV receiver for each classroom, it was necessary to make plans to have receivers moved from classroom to classroom. This involved time, planning and physical assistance on the part of school personnel. We also were concerned with such things as the correct placement of the TV receiver in the classroom and how shades or drapes should be adjusted during the reception of a program. It became apparent that teachers would have to be given instruction in the actual operation of the TV receivers if maximum results were to be obtained.

Programming in these two communities continued from January 26 until May 30. From all of the programs, both good and bad, we learned enough about TV programming and the problems involved in it to make us better qualified to begin a second year's operation in September 1953.

We had been operating in Highland Park and New Brunswick with a total staff of six people. A larger staff—more technical assistants and additional programming staff members—was needed for successful operation.

Plainfield, a city 12 miles from our studio, was selected as the site of our second experiment. Again, as in the previous year, we asked for program ideas from the teachers. A constant stress on teacher needs has been apparent throughout the entire project.

It was decided that work should be conducted in five major programming areas. One of our staff was assigned to the kindergarten-primary grades, one to the middle grades, one to the

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upper grades, and one each to the social studies department and the language department of the high school. (An elementary school and a high school were selected in Plainfield as cooperating schools.)

Talent for these programs came from a number of different sources. Faculty members from Rutgers University, Princeton University, and other institutions volunteered their services to help with this experiment. The help of experts was sought from such organizations as the National Audubon Society and the American Geographic Society. State groups, such as the junior leagues, participated as organizations. A number of individuals volunteered to help. In every case services were volunteered and the only cost to the state was, in a few cases, traveling expenses for those individuals who came to the studio to help.

Undoubtedly the selection of the right kind of talent is one of the most important decisions facing the management of any educational TV station. A person may be well versed in his particular field, but unless he has the personality needed for TV and unless he has the ability to impart his information to others, the TV program will not be successful. Many adults found that they experienced difficulty in bringing their program content to the level of elementary school children.

While we were in the middle of this programming, our commissioner of education appointed a 10 member state evaluation committee. This committee was charged with the responsibility of setting up evaluative criteria to judge the programs presented. Its members also offered help and advice in program planning and content. They tried to see that all programs presented were sound educationally.

During the two years of experimentation more than 800 programs have been presented. Some of these were repeat showings, the programs having been recorded on 16 mm. sound film. These kinescopes served a number of different purposes. First of all, they helped meet the scheduling problems of our schools. Each program was presented live the first time and recorded simultaneously. These kinescopes were used for repeat showings and were often used as many as seven or eight times either on the same day or on the following days.

CRITICIZED OWN WORK

The kinescopes also served to allow workers on the Television Research Project to view the finished program and to look at it critically. They could then decide where mistakes were made and take steps to prevent a recurrence of the same errors.

Some experimentation was also conducted in recording, from the air, commercial programs of value to the schools. These recordings, made with the consent of the commercial stations, were used in both the elementary school and the high school and provided the teacher with the opportunity to present material which she would not have available any other way, especially to present it at a time convenient to her and her teaching.

There seems no doubt, as a result of this experimentation, that TV is going to play an important part in education in the future. Like any other teaching aid, it can be misused, but with proper consideration given to the programs originating over the educational stations and with cooperative planning on the part of the teachers and administrators, television has a potential for education that few other teaching aids can equal.

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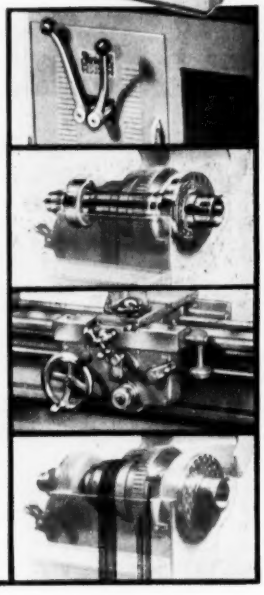
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The Sheridan High School employs boys to work in the kitchen, to wash dishes, dispose of garbage, and do other necessary jobs.

WHAT is the responsibility of the school for students who work in school lunchrooms? Some administrators believe that each child who gets a free lunch should do something to avoid a feeling of utter dependence and to prevent the attitude of "getting something for nothing." Yet the means by which a student earns his lunch can be more harmful to his personality than the food he gets is valuable to his health.

Employment need not be limited only to those who can't pay for their lunches but also should be offered to students who want to earn extra money. This was one of the chief considerations revealed in a study of the southern states. When some *not underprivileged* are employed, it elevates the standing of those who find it necessary to work.

When a student is employed, his work should not cause him to miss classes. He might work one hour or less, depending upon the number of lunches purchased by his labor. He should be regular in school attendance.

Job practices can constitute a positive learning experience for the child, as well as enabling him to do a necessary job well. Various factors affect student labor, such as the status of the school lunchroom in the minds of the students themselves and the size of the school community. Of great importance is the administrative policy of supervisory personnel. Is the person responsible for selection, direction and training of student workers interested in (1) getting the job done,



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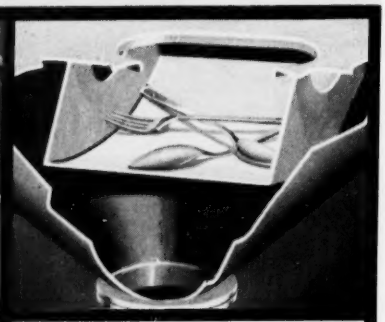
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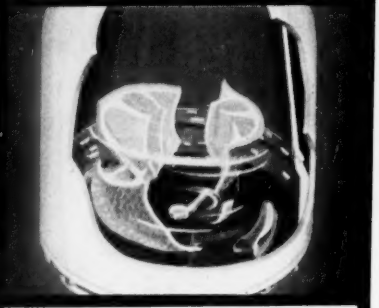
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regardless, or in (2) providing a positive learning experience?

There is a danger that some supervisory personnel get so "executive-minded" that they forget that student helpers are persons seeking their place in life. For some students lunchroom work may be their first experience with employment. Desirable tasks can be combined with undesirable ones. If possible, duties should be rotated.

Tasks may vary with the number of employes, the number to be served in the lunchroom, and available equipment. Some of the jobs and the experiences they offer are:

1. Cashier: Make change, keep accounts, sell tickets.

2. Serving line (both boys and girls): Learn the importance of personality, cooperation, coordination, mental alertness.

3. Milk supply: Fill the machine, collect empty bottles, and the like.

4. Dining room help: Fill napkin holders and salt and pepper shakers; provide straws for milk, paper towels, and soap for the dispenser.

5. Business management: Make inventories, regulate traffic, and file invoices.

These are *constructive experiences*, supplementing menial tasks that women workers in the school lunchroom do not care to do, such as peeling potatoes, disposing of garbage, caring for floors, washing pots and pans, and running the dishwasher.

STANDARDS FOR WORKERS

From the standpoint of cost and efficiency, as shown by a study of the southern states, there seems to be a trend away from student help. Evidences show more part-time adult workers. If and when student workers are used, they are required to:

1. Meet the same health requirements as full-time employes.

2. Conform to child labor laws as to safety and age limits.

3. Be appropriately dressed: clean aprons and hair nets for the girls and white coats for the boys.

4. Observe good personal hygiene and grooming.

When students are employed in the school lunchroom, they can derive positive values from such work. Among these are: promptness, courtesy, alertness, responsibility, cooperation, muscular coordination, and initiative. Also, they can learn to accept constructive criticism and do "an hour's work for an hour's wage."



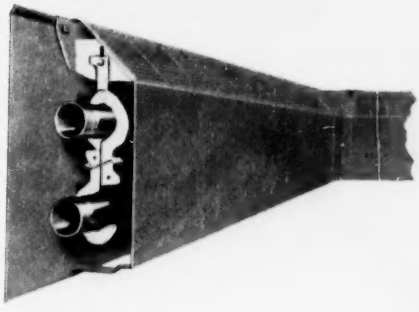
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Pennsylvania schoolmen discuss the

Cafeteria in the Modern School

THE school lunch program, born out of the depression in the Thirties, has developed into a full-scale adjunct to our educational program with problems of its own, according to Edgar Fuller, executive secretary of the National Council of Chief State School Officers.

Dr. Fuller spoke at the cafeteria section of Schoolmen's Week April 7 at Drexel Institute of Technology, Philadelphia. Assigned the topic "The Legal Basis for School Cafeteria Operation," he expanded it to include the administration, supervision and financing of the school lunch program. He considered, in some detail, the history of the program and traced its development up to the present time.

Before 1930 there were few school lunch programs. Today, virtually every new school building makes provision for a lunchroom. Under the plan as it exists today the United States Department of Agriculture administers the program to the states, and the various state departments administer it within the states. Beginning with the initiative taken by the federal government, the program has, since 1940, come to be recognized by law in the various states.

MORE STATE RESPONSIBILITY

According to Dr. Fuller the statutes are now adequate for complete national-state-local cooperation in a number of the states, including Pennsylvania. For several years now, the attitude of the United States Department of Agriculture has been that the states should assume more responsibility. Today some 15 states have taken over complete auditing. This, Dr. Fuller believes, is all to the good, because he prefers state to federal supervision. As the program has developed and as federal participation has been in the direction of encouraging state participation, the states have come to have less concern over the matter of federal supervision of the lunch program.

In speaking of the legal aspects of the program, Dr. Fuller pointed out that there has been no pronouncement on the constitutionality of the lunch program by the U.S. Supreme Court. As a result, the constitutionality of that program still is not clear. In the absence of constitutional or legislative enactments forbidding them to do so, it may be assumed that it is constitutional for the states to administer lunch programs in both public and private schools. In 21 states and three territories, the state (or territory) administers such programs in public schools only. Dr. Fuller appeared to favor the state's administration of the program in both public and private schools wherever possible under the laws of the state.

MAIN PROBLEMS TODAY

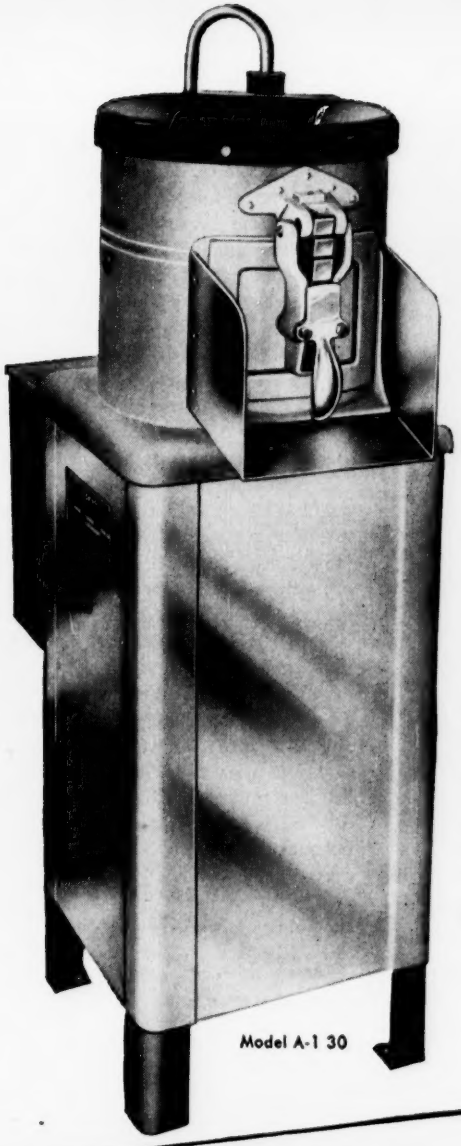
He recognized the following as the main problems affecting the lunch program today:

1. Inadequate physical facilities. (Standards are improving, and extensive remodeling is required.)

2. Adequate training for lunchroom personnel—a state and local problem. (Training that includes a working knowledge of sanitation, nutrition and wholesome preparation of foods is needed.)

3. Uncertainty of federal funds. (The federal government is increasing the amount of surplus foods but decreasing cash contribution to $68,000,000, according to present budget plans. This is $15,000,000 less than last year. An increase in food allotments is planned, but cafeterias still need cash to purchase some items, and a cut in cash is not entirely made up by the addition of surplus foods, which do not always serve the main nutritive needs of school children. The cash available per meal in 1946 averaged about 9 cents; with increased cost of food, labor and so forth, today it averages about 4½ cents.)

4. Need for more adequate state



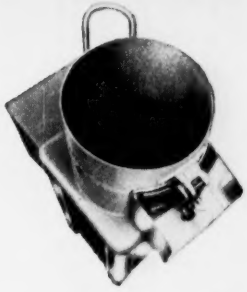
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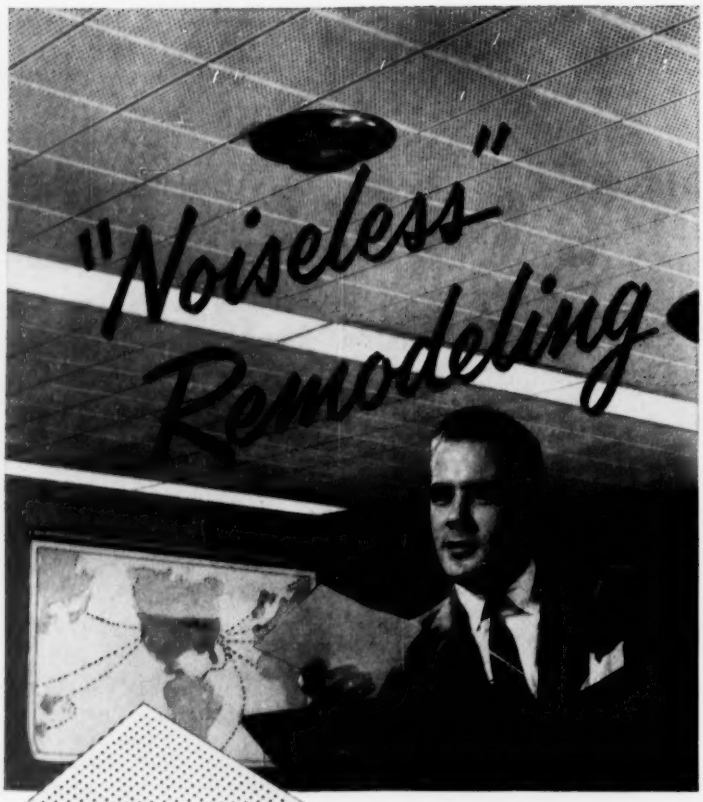
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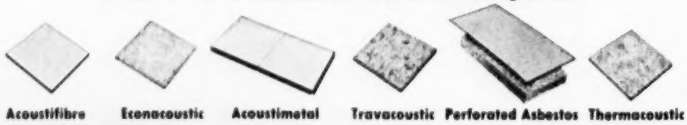
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and local financial participation. (Federal controls would decrease and could be virtually removed if the states would assume more of the financial responsibility.)

Ardenia Chapman, dean, college of home economics, Drexel Institute of Technology, Philadelphia, was unable to be present because of illness. Her paper was read by Grace Woodward, director of school cafeterias, Springfield (Montgomery County), Pa. In her paper Dean Chapman emphasized the need for and the contribution of the school lunch program to the improvement of nutrition in children, pointing out that school lunches provide one-third of the child's daily intake of food.

Miss Chapman also pointed out the need for better training of cafeteria workers, managers and directors primarily. She stated that Drexel Institute now has more calls for professionally trained people in this field than it can meet and suggested the need for a recruiting program. One thing she recommended was a salary schedule for professionally trained cafeteria workers at least as high as that for teachers, stating that pay for this work is comparatively low. In pointing out that education today accepts the responsibility for the development of the child as a whole, she stated that good nutrition was an important aspect of such development.

PROBLEMS IDENTIFIED

Miss Woodward, in summarizing Dean Chapman's paper, identified the following five major problems, as she saw them:

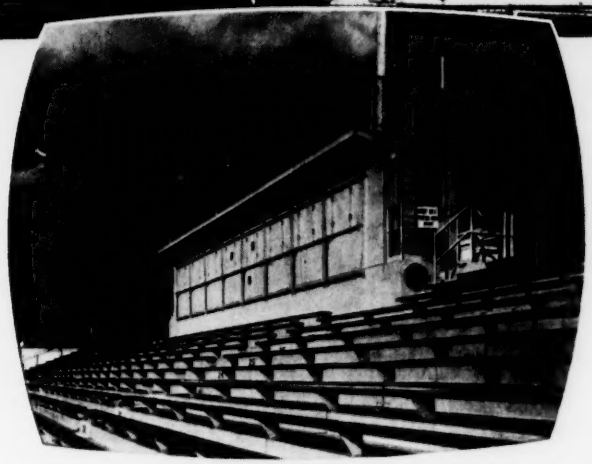
1. Need for more uniform policies in state administration as well as in local administration, particularly in the larger school systems.
2. Need for more adequate supervision and training of personnel.
3. Creation of a sound financial basis for the lunch program.
4. Integrating school cafeterias into the educational program—a problem about which a lot is said but little is done.
5. The overloading of cafeteria managers with many additional duties.

Margaretta S. Plewes, director of school cafeterias, Abington, Pa., who took Miss Woodward's place in a panel discussion, reported on a study she and Miss Woodward had made, entitled "A Survey of the Policies and Practices of the School Lunch Program."

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period it was evident that the audience was primarily interested in two main types of questions: (1) What educational use can be made of the expensive equipment needed to serve but one meal a day, *i.e.* how can cafeterias be integrated into the educational program? (2) What can be done to keep costs of construction and equipment down?

SEVERAL ANSWERS OFFERED

Both panel and audience members offered several answers to the first question. In one elementary school the children use the kitchen to prepare a treat every time a holiday is celebrated. In another school a group of home economics students, during a nine-week period, is in the cafeteria kitchen two hours each morning studying "quantity cookery." In a third school the business education department has taken over the business management of the school cafeteria, thus giving students practical instruction in the field of business.

Violet M. Zimmerman, Lower Merion Township schools, Ardmore, Pa., sounded a warning that should be heeded. She voiced opposition to the use of low I.Q. pupils for kitchen labor without pay. She thought the principle of using them as a means of keeping down costs was wrong and felt pupils should not be so used unless it could be shown that the experience they received contributed to their education. Miss Woodward raised the pertinent question of why it should be necessary to justify the cost of equipping expensive kitchens on the basis of their use in the educational program and pointed out that it did not seem necessary to justify expensive heating units on this basis.

KEEPING DOWN COSTS

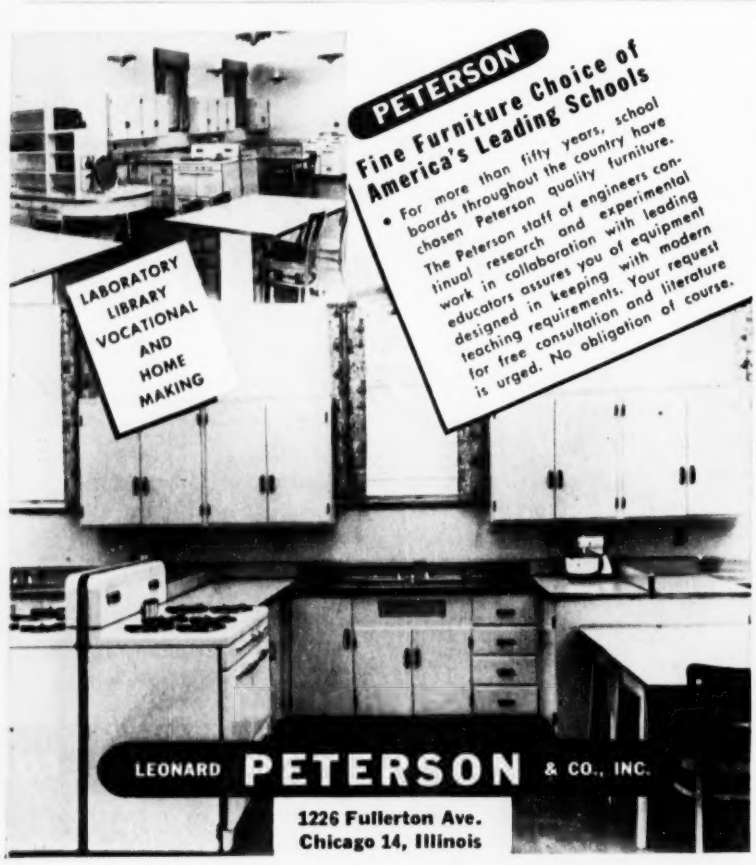
With reference to the second major question, how to keep down costs, Robert Abernethy, superintendent of schools, Haverford Township, Pennsylvania, raised the question of whether all the expensive equipment now used was necessary. He pointed out that architects and builders were inclined to think only of types of equipment used by commercial cafeterias. He doubted if this was necessary for a cafeteria serving but one meal a day. He thought equipment should not be patterned after that used for commercial purposes and suggested that the problem be studied to the end that more equipment be developed to meet the particular needs for which it was to be used.

Frances Hoag, chief, school lunch and nutrition, state department of education, pointed out that schoolmen are inclined to consider the first or initial cost only and stated that cheap and inferior equipment is likely, in the long run, to increase operating costs. She stated good equipment will cost, on the average, around $250 per child, which is not too much when it is considered that it will last for many years.

John H. Tyson, superintendent, Upper Darby, Pa., expressed the view that it was the job of cafeteria managers to assist in keeping the costs of equipment down to a reasonable amount. Medill Bair, regional superintendent, Pennsbury school district, Falsington, Pa., advised the cafeteria managers that they should not be apologetic for the costs of their equipment because he did not feel they are high when the life of the equipment and the function it serves are taken into account.

TEACHERS MUST HELP

About 125 persons attended this meeting. A showing of hands indicated that cafeteria managers composed about one-half of the group, and superintendents and principals about one-fourth of it. The remainder of those attending were teachers and school board members. A small sprinkling of home economics teachers was noted in the group. I came away feeling cafeteria managers were greatly, and possibly primarily, concerned about how the cafeteria might be better integrated into the educational program of the school. This, I think, is the result of the fact that administrators and board members have done a great deal of talking about the expense involved, primarily in equipping the kitchen. While some will feel Miss Woodward had the answer (why justify expense on an educational basis?), many feel the cafeteria has a contribution to make, but, because of the heavy demands on their time, they have not the time to attack the problems constructively. As someone pointed out, the teachers must help more than they have in finding the solution.—LEE O. GARBER, *associate professor of education, University of Pennsylvania.*



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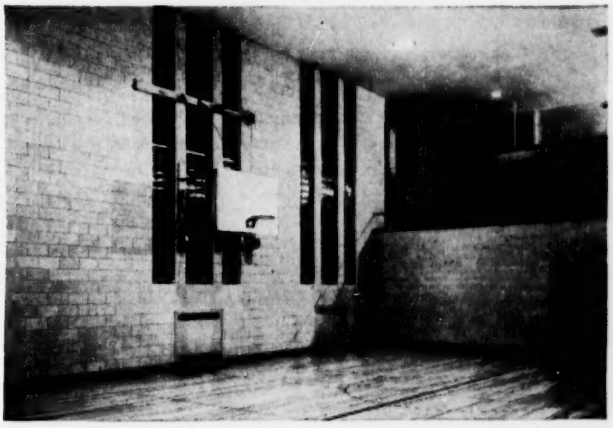


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Highlights of Annual Convention of Southeastern Business Officials

Modern Education Brings New Problems of Management

ARTHUR H. RICE

THE importance of management must not be sidetracked in current efforts to improve school administration, warned W. D. McClurkin, director of surveys and field service at George Peabody College for Teachers, Nashville, Tenn., addressing the third annual convention of the Southeastern Association of School Business Officials held at New Orleans, April 8 to 10.

Dr. McClurkin recognized that the emphasis now being placed upon community leadership and human relations, especially in research projects of the C.P.E.A., is basically sound, but he believes that concentrated emphasis upon this phase of school administration can lead to misunderstanding unless it is balanced with emphasis upon other phases of educational research.

He warned that the tremendous growth in the size and scope of business administration for public education has created a great need for extensive training and research on the business-administration side of public education.

The expanding program and influence of the parent organization was described by Schuyler C. Joyner, president of the Association of School Business Officials of the United States and Canada and deputy business manager of the Los Angeles city schools.

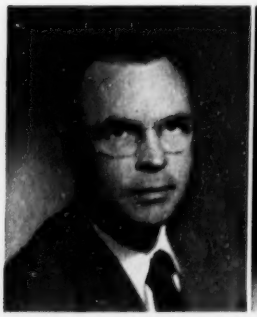
Dr. Joyner mentioned eight fields of research in which the association is setting up a potential five-year program. He told of the increase in office space and personnel for the headquarters of the A.S.B.O. at Kalamazoo, Mich.

There are now 18 state and regional associations, he said. "The success of the international group, now 47 years old, and the rapid development of smaller groups will continue if, as business managers, we keep to our own field," said Dr. Joyner.

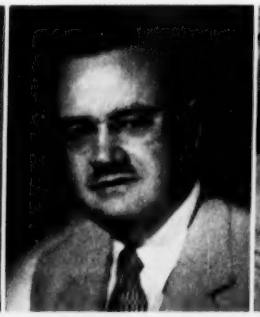
The A.S.B.O. president believes that the school business officials should maintain the identity of their specialized services to education by holding their programs independently of other groups. Neither is anything gained, he said, by arguments on dual or single controls in the administration of a school system.

He also told of extensive plans for the international meeting at Los Angeles, October 10 to 14.

Banquet speaker was James F. Redmond, superintendent of schools, New



Norman J. Aaron



Crawford Greene

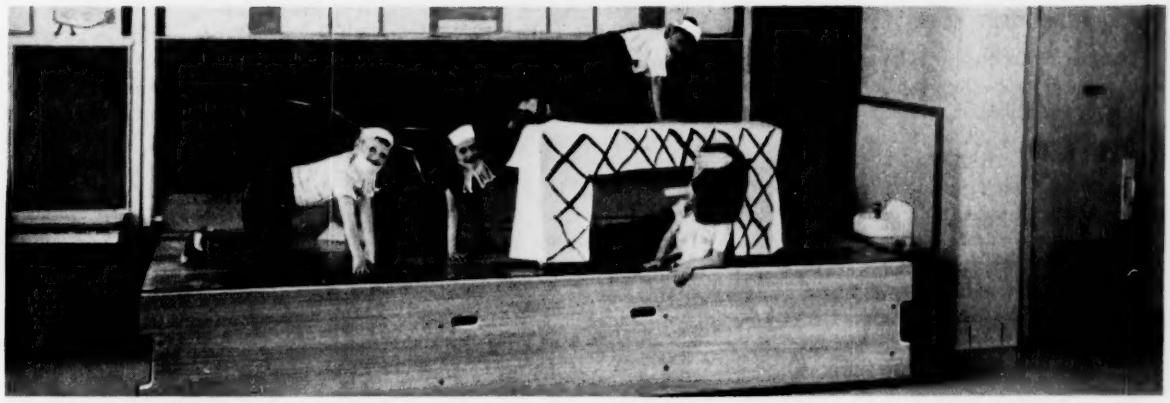


Walter R. Latapie

NORMAN J. AARON, newly elected president of the Southeastern A.S.B.O., has been associated with the Fulton County schools in Georgia since August 1936, except for the period 1942 to 1946, when he was a member of the U.S Air Force. Starting as head of the industrial arts department, he later (in 1939) became coordinator for diversified cooperative training. Upon his return from service he was appointed director of maintenance. Since 1952 he has served as assistant superintendent. Mr. Aaron is now a lieutenant colonel in the air force reserve. . . . CRAWFORD GREENE, vice president, has been director of business affairs of the Hillsborough County schools in Florida since November 1948. Previously he had served seven years as a high school principal in Oklahoma and Arkansas, six years as superintendent of schools at Blytheville, Ark., and 14 years in the Arkansas State Department of Education, except for 20 months when he was on leave to the U.S. Office of Education. Mr. Greene has served as a director of the Southeastern A.S.B.O. . . . WALTER R. LATAPIE, reelected secretary-treasurer, is a native of New Orleans. He went directly from its public schools into a job with the school board in 1923. Since 1936 he has been its chief accountant, having recently organized a new accounting and budget system. He is a member of the education committee of the Young Men's Business Club of New Orleans and a charter member of the Southeastern A.S.B.O.

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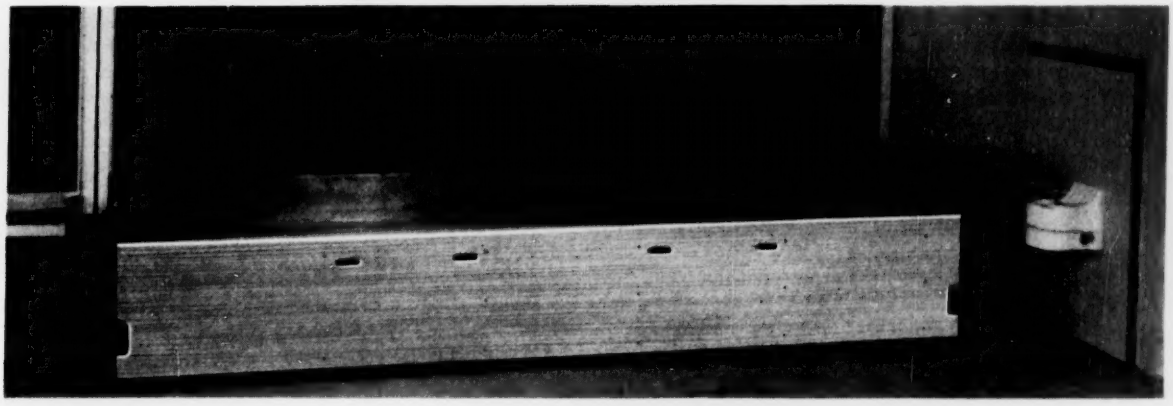
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Orleans. Dr. Redmond's discussion of "The Rôle of the School Business Official in Today's Educational Program" is printed in part on pages 82 and 83 of this issue.

BIRMINGHAM NEXT YEAR

Out of invitations from more than half a dozen cities, the board of directors chose Birmingham, Ala., as the locale for next year's convention of the Southeastern A.S.B.O. The date will be announced later.

Officers elected were: president, Norman J. Aaron, assistant superintendent, Fulton County, Atlanta, Ga.; vice president, Crawford Greene, business manager, Hillsborough County, Tampa, Fla.; secretary-treasurer, Walter R. Latapie, chief accountant, Orleans Parish School Board, New Orleans. Also a member of the board is the immediate past president, Rayburn J. Fisher, assistant superintendent of Jefferson County schools, Birmingham, Ala.

The directors are J. R. Montgomery, assistant superintendent, Mobile County, Mobile, Ala.; Annie V. Massey, treasurer and business manager, Muscogee County, Columbus, Ga.; Edwin R. Ward, business manager, Fayette County, Lexington, Ky.; Paul L. Franklin, business manager, Meridian, Miss.; Fred A. Smith, assistant superintendent, Wake County, Raleigh, N.C.; Roy C. Taylor, business manager, Greenville County, Greenville, S.C.; Dexter M. Jeffords, assistant superintendent, Oak Ridge, Tenn., and J. S. McDonald, business manager, Roanoke, Va.

HEAR NEW PRESIDENT

"It is the full responsibility of the school board (and not the architect) to do the *planning* for the construction of a schoolhouse," said Mr. Aaron. He emphasized that the planning "was to be accomplished through the superintendent and his staff and that this responsibility may be delegated to no one else."

"Educational consultants, if used, may have valuable suggestions to offer the school board, but local needs and conditions must be of first consideration," continued the Fulton County school administrator. "And the board must make the final decision as to what will be offered to its children. Local boards must not lean too heavily on outsiders to tell them exactly what must be done."

What then is the rôle of the architect? Mr. Aaron believes that the architect is "the means through which *planning* is delineated. The school board's requirements must be spelled out in a clear-cut, concise manner in order that there will be no doubt in the architect's mind as to the wishes of the board."

Although he believes that the final responsibility rests with the school board, the speaker from Atlanta does not expect that the board itself will do most of the actual planning. In this respect, he said, the planning is a shared responsibility, with "the superintendent and his staff, teachers, P.T.A. people, civic groups, representatives from zoning and planning commissions, and others working as a team." Out of such planning, he believes, a sensible education program must evolve, for without it "there is no basis for developing plans for a physical plant."

ECONOMICAL IN UPKEEP

"In Fulton County," said Mr. Aaron, "we are able to write into our specifications the type of building frame and construction materials we desire to use in our buildings. Through many years of maintenance on school buildings we have learned something about materials which are economical in upkeep. We write these materials into our specifications. The architect is not this close to the problem. With all due respect to him, seldom does he see the building after construction and final acceptance.

"Another outstanding example of the need for planning our educational specifications is in standardization of heating controls. During our recent building program we had 28 projects under construction—some were completely new buildings and some were additions to existing buildings—and for these 28 projects our board employed 28 different architectural firms. If these firms had been left to their own choosing, we would now have 28 different types of heating system controls, but instead we have only one and it's the type we want.

"In the development of our educational specifications, we are not attempting to assume the rôle or duties of the architect. As school people we must know what we want in our school buildings. These specifications guide the architect; he is grateful for this assistance. He still has a tremendous amount of work to do before building plans are finally completed."

Agreeing with Mr. Aaron that "the exact requirements of the school should be established by the educators," Charles R. Colbert, New Orleans architect, defined the architect's goal in the economical design of school buildings as a "trilateral balance." The three sides of the trilateral he classified as (1) area contents of the structure, (2) finishes and construction technics, and (3) budget.

"These three—area, finishes and budget—must be considered in the design of any new building, and *an architect cannot be restricted in all three,*" warned Mr. Colbert. "It is possible in the architect-client relationship for the client to control any two items of the trilateral balance, but of necessity the architect must control the third. For example, area and budget may be fixed, but the architect must control finishes. Or the client may establish area and finishes, but the architect cannot then be reasonably limited by budget."

Architect Colbert expressed the belief that the enclosed space in a school can be reduced in many ways. "Classrooms and auxiliary facilities, particularly general activity areas and those to be used by the community, are being oversized," he said. "Greater weight should be given to outdoor facilities.

"Economies will be realized," said Mr. Colbert, "by keeping the perimeter of buildings as close as possible to the efficient space enclosures of the square and rectangle. In other words, E-shaped buildings, short wings, bay windows, and so forth which have been common in the past are expensive. Outside walls should be shortened and the shape of the building simplified."

TECHNICS AND FINISHES

In discussing construction technics and finishes, the second leg of the trilateral balance, the New Orleans architect declared that "much expense still is being incurred because fancy but nonessential doodads are being incorporated in school buildings, such as proscenium arches and monumental doors." He recognized that "archaic regulatory requirements of school building codes are costing school systems many thousands of dollars annually." He believes the architect should be encouraged "to utilize larger but lighter building units and to take full advantage of modular coordination. Empirical formulas, out-of-date rules of thumb, and unreasonably conservative safety factors are enormously costly."

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ing. "Artificial illumination," he said, "need not be provided for total darkness but should be considered only as an adjunct to sunlight for daytime class use. Only those rooms used at night need additional lighting."

Economies can be effected through better use of dual functioning materials, such as "roof decking materials which have not only structural but thermal and acoustical properties as well."

On the other side of the ledger, Mr. Colbert said, not enough money is being invested in landscaping. "Proper grass coverage, for example, can directly reduce repainting and janitorial costs. Or trees may be used as windbreaks or sound and sun barriers, while low planting can serve as activity area separators.

"The third leg of the trilateral, the budget," said Mr. Colbert, "requires systemwide planning.

"Only by establishing reasonable life spans for all buildings may financial resources be properly apportioned. The cost of schoolhouses should be considered as a total cost of construction cost, operating costs, and maintenance and repair costs. There must be money available to take care of obsolescence in future years. This can be assured by reasonable, well planned renovation and replacement programs."

Mr. Colbert hit hard at projects that take an unreasonably long period of construction. "Reduction of time necessary for erecting school facilities," he said, "should be given careful consideration, especially in the selection of materials and the methods of construction." But the greatest of all waste of funds, he believes, occurs through "improper location of facilities."

"The public does not realize how extensively the public schools are involved in the transportation business," said Kermit A. Johnson, superintendent of Tuscaloosa County schools, Tuscaloosa, Ala.

"More than $200,000,000 is now spent annually for pupil transportation, involving 100,000 school buses. Of the total pupils enrolled in schools in this country, 28 per cent are now taken to and from school at the expense of the school district," he said.

Dr. Johnson emphasized safety and economy as the first essentials in pupil transportation. Both of these goals make it imperative that the district carefully plan and put into operation a *preventive* maintenance program. Of related importance is the careful selection and training of drivers.

Supt. Johnson described how, in his state, chassis and bodies for school buses and also tires are purchased through state bids.

Discussing the topic "Transportation of Supplies," Roy Taylor, business manager for the school district of Greenville, S.C., described how that district operates a plan of central purchasing and distribution from conveniently located warehouses. He stressed the importance of well planned routes and requisition forms and suggested that much of such work can be organized and completed during the summer months.

GET THE BEST HOUSEKEEPING

"Why not try to get the best housekeeper for our educational facilities, the same as we try to get the best trained teachers for our children?" queried Dexter M. Jeffords, assistant superintendent of schools at Oak Ridge, Tenn. In urging that the teachers and the public recognize the essential nature of plant operation, he



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asked for a greater respect for the custodians' services. Such recognition starts with high selection standards, choosing men who are physically fit, of good moral character.

"Certainly," he said, "the starting age should not be more than 45 years and preferably within the range of from 21 to 40 years."

PROBATION PERIOD ADVISABLE

Mr. Jeffords thought that a short probation period was advisable for the beginning custodian. "Continuous training for all custodians is a 'must,'" he said. "You can utilize your own staff in such training programs. Demonstrations can be especially helpful, also films and carefully planned visits to other school systems. Every custodian should have appropriate information and printed materials prepared especially for him, such as a manual or handbook.

"There's no place today for the arrogant, bossy supervisor," continued the speaker from Oak Ridge. "Neither is there any justification for employment of cheap labor."

Plant operation or building services probably will require 10 per cent of a school system's budget, he estimated. It's economy to purchase labor saving tools and equipment since labor represents such a large part of the total cost of plant operation.

Mr. Jeffords also emphasized the importance of the janitor as a public relations agent. Sometimes he is the only contact that the public has with a school.

"The employment, training and supervision of *operating* personnel is just as important to schools and school children as the selection of administrative or instructional personnel," declared E. H. Moldenhauer, director of maintenance for the Fulton County schools, Atlanta, Ga.

Mr. Moldenhauer described three area levels of training and supervision for operating personnel in Fulton County. One of these is the school to which the individual is assigned, where a great deal of the supervision may be directed toward obtaining the confidence and the enthusiasm of the individual, as well as showing him how to utilize best materials and tools.

For the second level of training, centers are established in centrally located regions where a majority of the new personnel is given training and experience before being assigned to permanent location. The third area consists of general meetings, held at regularly scheduled intervals, to which representative manufacturers are invited to demonstrate equipment and where audio-visual aids are used to show the misuse of various products. Meetings of classroom teachers, school administrators and custodians also are held, with resultant better understanding of one another's problems.

Effective use of specifications and of the testing laboratory were discussed by Monroe Melton, assistant superintendent of Dade County schools, Miami, Fla. He illustrated a number of ways in which various types of school supplies and equipment may be tested with a little ingenuity.*

MAINTENANCE IS DIFFERENT

In maintenance today we're dealing with something different from what we had a generation ago, said Nathan M. Patterson, supervisor of special services for Muscogee County schools, Columbus, Ga. New types of buildings involve the use of much more masonry, more glass, different kinds of flooring, modern installations of acoustical material.

The maintenance of new buildings necessitates not only the retraining of custodial personnel but also some changes in the types of individuals to be employed. For example, the older buildings, constructed primarily of wood, required more carpenters for repair work. Today there is less need for carpenters on the school maintenance staff.

Also involved are much more machinery and various types of equipment which require greater skills for upkeep and repair.

Another new development is the location of schools on larger sites, which in turn involves problems of drainage and landscaping. More and new kinds of equipment are required for maintenance.

Pinch-hitting for John B. Freeman of Memphis, Tenn., Edward J. Tuohy Jr., purchasing agent of Orleans Parish schools, discussed "Good Purchasing Practice." He illustrated the many problems of determining the quality of a product by narrating his experiences in testing floor wax.

*Mr. Melton expressed his philosophy of purchasing in an article in The Nation's Schools for February 1954, "The Teacher's Part in Selecting Teaching Supplies."

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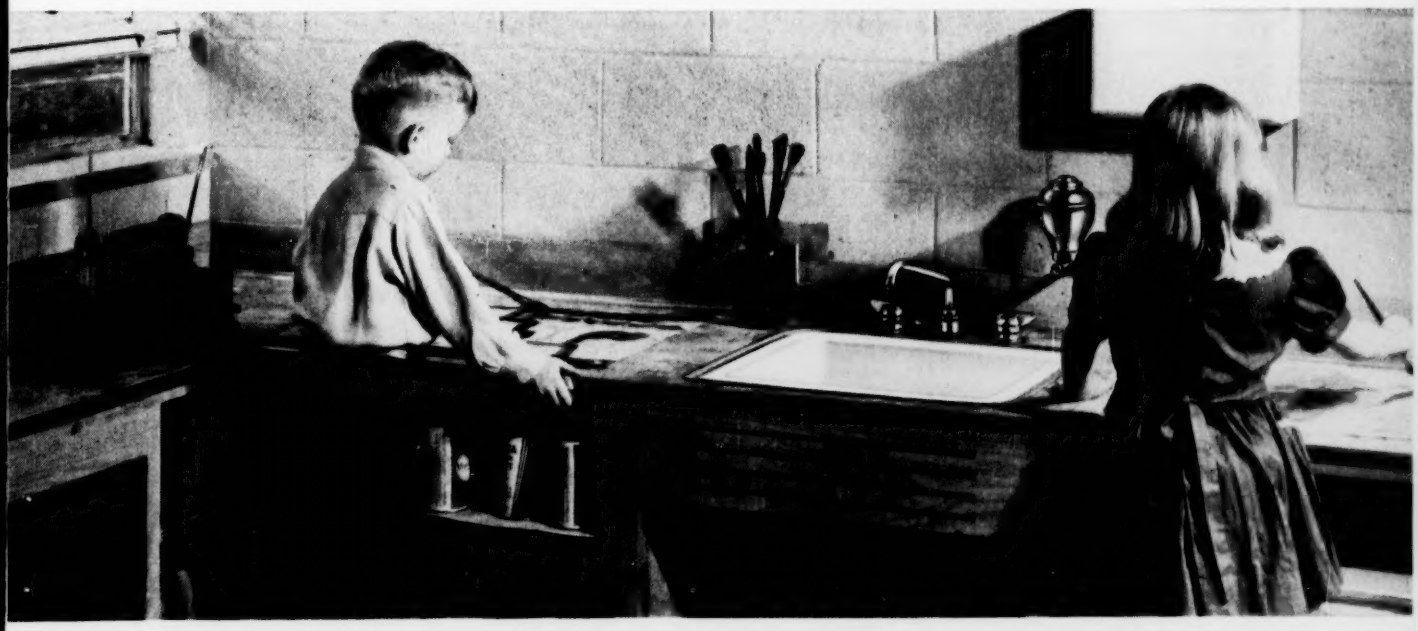
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Tackling the problem of the

Community School

Book Review by M. L. CUSHMAN
Professor of Educational Administration and Rural Education
Iowa State College

EVERY now and then someone comes along with enough professional nerve to tackle some difficult educational problem. Such daring must have characterized the publications committee of the N.E.A.'s Department of Rural Education as it produced its 1954 yearbook, "The Community School and the Intermediate Unit."

As the committee itself says:

"This is a book about people and their schools. It is about education—good education—the best kind of education obtainable. It is concerned with the educational programs which communities provide and about the educational programs which they do not provide. It is primarily about small communities and their school problems, problems that involve people and personalities—children and adults."

"What are you going to do with Harvey?" (He is mentally retarded.) "What are you going to do with Betty Lou?" (She has had rheumatic fever.) "What are you going to do with Bruce?" (He has college ambitions but not a college preparatory record.)

JUNGLE OF MISUNDERSTANDING

With local school district reorganization again assuming nationwide proportions (the number of districts was down from 104,000 in 1947 to 66,000 in 1953) and with the conspicuous strengthening of the county intermediate unit, the relationships between local and intermediate units have been a jungle of misunderstanding. Some states through local unit reorganization are developing multi-community "community" units in order to make a comprehensive program of education available and actually getting districts larger than community in size but still too small to function effectively as intermediate units. Other states are so bolstering their county intermediate structure with financial arrangements that the need for effective, reorganized community districts is not keenly felt.

ORGANIZED CHAOS

Should local district reorganization precede, occur with, or follow county intermediate district reorganization? By what criteria should educational functions be assigned to the local intermediate and state agencies in education? By what procedure do we move from the greatly varying types of district structure now found in most states at local and intermediate levels to the proper size of districts, to the defensible assignment of educational functions to them, and to satisfactory ways of financing them? The yearbook committee has not dodged these issues. On the other hand it hasn't answered them all either as most local and county superintendents of schools will probably point out. Some may say that the committee has at least organized the chaos into manageable proportions.

It has done more than that. The yearbook has developed a condensed photograph of a comprehensive educational program—an elementary, secondary, community and special pupil services program. It has shown what our present administrative framework is and why children usually do not get needed educational services because of deficiencies in the structure. Both local and county administrators will find examples of the "how to do it" sort of thing that makes up a large part of their daily activities (*e.g.* how to get more library books, how to help the elementary music teacher, how to obtain a remedial reading program, how to help handicapped pupils, how to develop a guidance program, how to help teachers). The yearbook is not entirely theoretical.

There is, however, enough educational theory to place the basic concepts on a solid foundation and stimulate the profession to some careful thinking and weighing of values. Note such statements as the following:

1. The structure of the intermediate district must take account of social and economic factors; the reality of a community is of more importance than a given size of school.

2. The three-unit type of organizational structure — state, intermediate and local—is a bulwark against the arbitrary exercise of centralized power as well as a facility for adaptation to local conditions and circumstances.

3. A function of education should be allocated to that unit closest to the people where it can be carried out with completeness, equity and efficiency.

4. The rôle of the intermediate unit should be that of assisting the local community schools in developing their own programs.

5. The services of the intermediate unit should supplement (not supplant) the efforts of the community school.

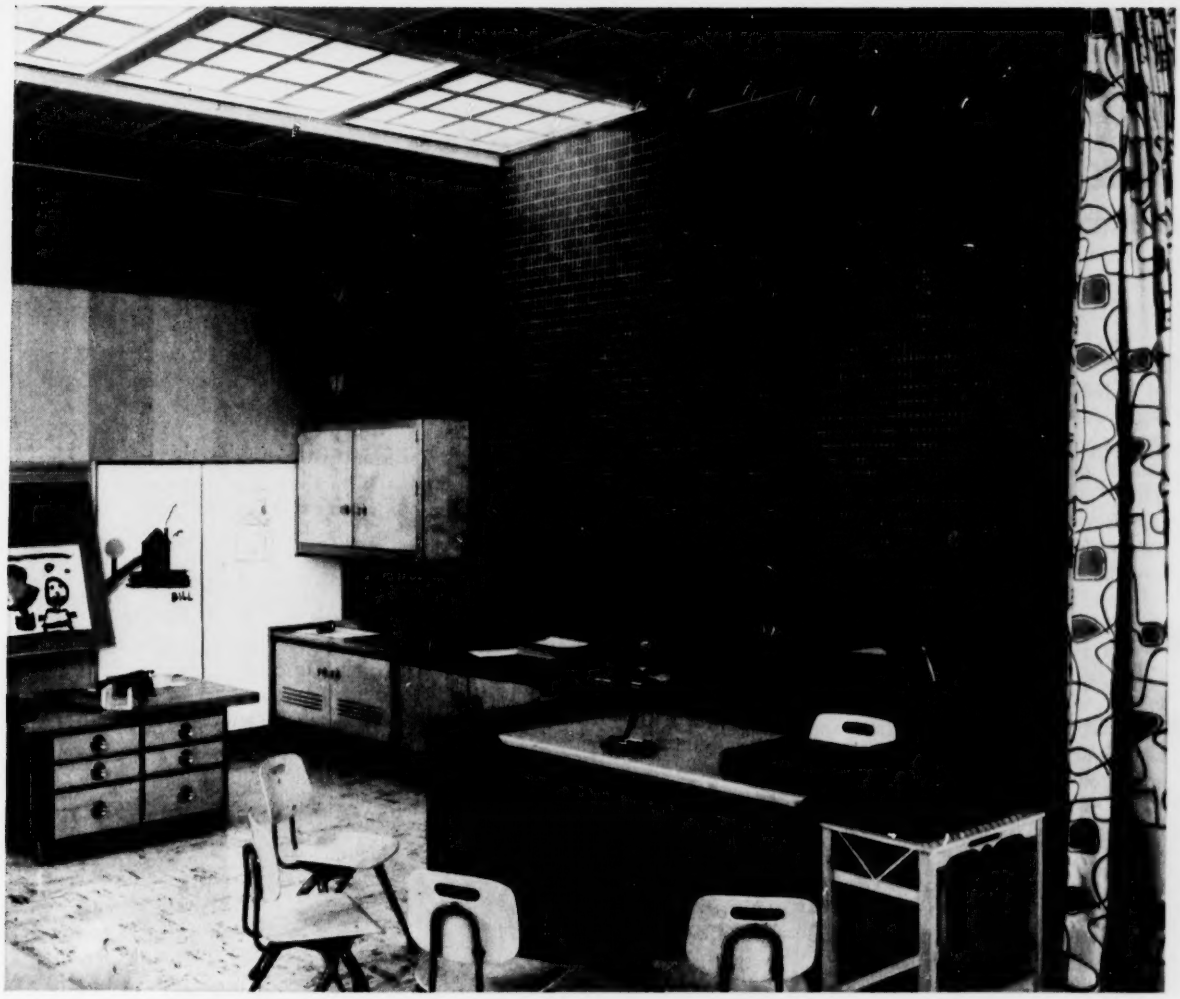
MOST IMPORTANT UNIT

There are many other basic assumptions with which the yearbook is concerned. The committee has proceeded on the assumption "that the community school is the most important unit of school operation."

This yearbook is timely, helpful to both local and county superintendents of schools, well organized and carefully written, thoroughly documented (one whole chapter is devoted to a review of current research). Certainly in terms of the magnitude of the problem it is one of the most significant yearbooks the Department of Rural Education has ever published.

Why not devote your next county schoolmasters' club meeting to a review of this significant publication? It might help you to solve the problems of Harvey and Betty Lou and Bruce.

The yearbook was edited by Robert Isenberg, assistant director, division of rural service, and planned by the department's committee on publications and constructive studies: chairman, Robert S. Fox, principal, University Elementary School, Ann Arbor, Mich.; Effie Bathurst, research assistant, U.S. Office of Education; Burton W. Krietlow, assistant professor of rural education, University of Wisconsin; Roland McCannon, manager, Illinois Pupils' Reading Circle, and John Wilcox, supervising principal, Central School, Candor, N.Y.



Research Laboratory Classroom. Daylighting Laboratory, University of Michigan, Ann Arbor, Mich. Photo: Hedrich-Blessing.

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wire from Washington

All in the hopper!

► A half dozen or so major educational events were in the making in Washington during May. If by the end of that month the events aren't quite "made," count on the Washington June heat to speed up action in the legislative, judicial and executive branches of the government.

The "President's three-point program" was increased to four items—though none moved rapidly through Congress. To the President's proposals to authorize state-by-state educational conferences, cooperative research, and a national advisory commission for education was added the suggestion that it is time to revise the vocational education acts. Sen. H. Alexander Smith (R.-N.J.) introduced a bill to repeal the Smith-Hughes and George-Barden acts and to create a new formula for supporting vocational education.

As this is being written vocational educators have not yet made up their minds about Mr. Smith's proposals (which were, of course, written in the Department of Health, Education and Welfare), and Congress has not yet made up its mind about the first three measures (which were also written in the department). All bills are under study by a House or Senate committee, or both.

Also in committee, this time the Senate finance committee, is the provision that would exempt retired persons over 65 from paying income tax on sums not larger than $1200. The N.E.A. looks to this measure as one that would bring relief to thousands of retired teachers. Chances for final approval look fair or better, but the Senate committee wants plenty of time to study the proposal.

Meanwhile, Commissioner of Education Brownell is also pleading for more time before making important policy decisions for his agency. During the last month he has concentrated on building up the strength in his "front office," most notable being his appointment of J. Kenneth Little, a University of Wisconsin official, as deputy commissioner. It is assumed that next will follow appointments to fill important and long standing vacancies, such as those for assistant commissioner for vocational education, chief for the division of higher education, and chief for the division of publications and reports.

Most eagerly awaited in Washington, however, is the ruling by the U.S. Supreme Court on racial segregation in the public schools. Every Monday (the day on which opinions are issued) reporters crowd into the Supreme Court chamber in anticipation of the big story. So far it hasn't come. Unless all signs go awry, it must come before June 7.

The House is confused

► Officials of highest rank, including the President and his brother, have professed their faith in the international exchange of students, teachers and educational officials. Yet, at this writing, the threat to this activity from the House side of the Congress has not yet been removed.

Early this spring the House appropriations subcommittee looked at a request from the U.S. State Department for $15 million—the amount voted last year for educational exchanges. The subcommittee found it "too high," reduced it by $6 million. This left only $9 million. About $1.5 million was allowed for administration. This supposedly meant a neat $7.5 million to pay for exchanges.

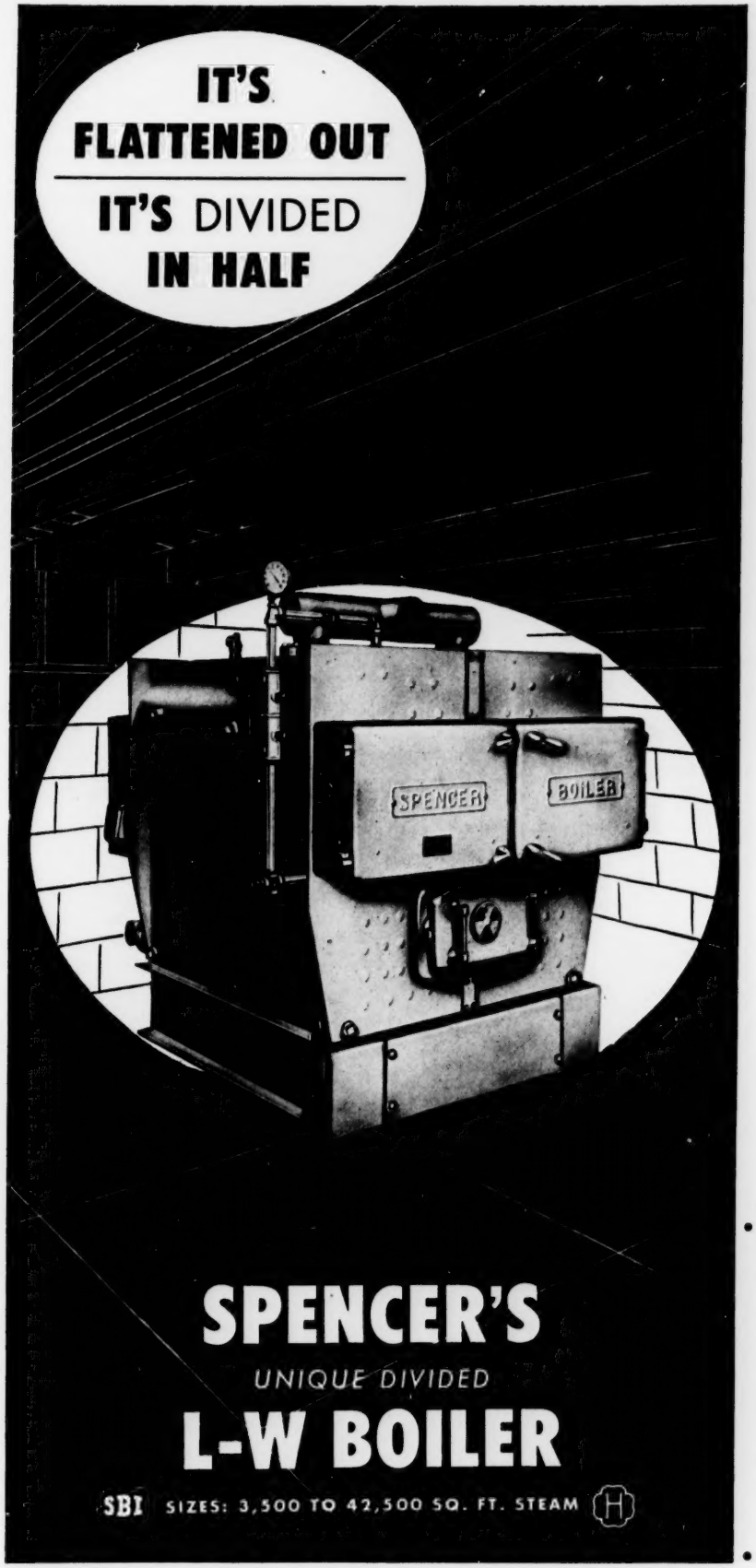
But the subcommittee tied this up with a restriction: the $7.5 million must be used only to buy foreign currency. In other words, no American dollars were to be available to the State Department. The practical effect of this restriction would be to prevent the State Department from sending Americans abroad (because we have to pay for their trips in dollars). The subcommittee would permit the State Department to buy foreign credit only from 21 countries, each one specified by name. In practice this would have meant that we would have the means to bring over small numbers of foreign educators from about only one-third of the countries with which we have established cultural relations in the past.

What the subcommittee recommended the House approved—and without discussion. Only then did the alarm sound. The internationally minded cried "Murder! Havoc!" They asked school people to write, wire and phone their national legislators. They implied that sinister forces were at work to scuttle the educational exchanges.

Then the Senate appropriations committee took up the question — and the hopes of those who wanted to restore the money rose. First, the senators were informed through confidential channels that President Eisenhower does not want this activity curtailed. His brother, Milton Eisenhower, whom the President sometimes uses for confidential missions to Capitol Hill, was on public record that "elimination of exchanges in countries which are critically important as bulwarks of the free world would be a serious blow to our international relations."

Then an unprecedented step — for the first time in history a United States vice president appeared before an appropriations committee to ask for support for a departmental program. But Richard Nixon, fresh from his world-wide trip, ignored tradition and asked the Senate to give the State Department the full $15 million because "my trip through the Far East has demonstrated to me that the exchange program gets across the American point of view more effectively than any other program."

During this same hearing, senators as sharply different in their ideas as William Fulbright (D.-Ark.) and Bourke



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Hickenlooper (R.-Iowa) agreed that "money spent for educational exchanges are the best dollars we can spend internationally." And Sen. Styles Bridges, powerful chairman of the Senate appropriations subcommittee, hinted broadly in May that the Senate would give the State Department the entire amount it wanted and that the House would agree to the sum in conference.

This brings up the question of how determined the House is to curtail the educational exchanges. Is it committed to reducing this activity, and was its subcommittee action part of a planned campaign to eliminate the exchanges? No such motives can be found by any competent observer.

Two simple explanations can be advanced for the House attempts to cut the funds for exchanges. First, the House appropriations subcommittee was under orders from Chairman John Taber (R.-N.Y.) to save money, and as a consequence "the money boys" took a whack at any and all budget items brought before them. They saw no reason for excluding the State Department's request. Second, the money boys may have been confused by the scope, variety and complexity of the educational exchanges.

CONTROVERSY ABOUT MONEY

Educational exchanges have their roots in the Smith-Mundt and the Fulbright acts (and the controversy is about money for programs under these acts). But, in addition, the House subcommittee noted that there are special acts for exchanges with Germany and Austria, with Finland, with Nationalist China, and with India. Then there are special exchanges paid for with funds given to the Foreign Operations Administration (the old Mutual Security Agency).

As of this moment, the State Department carries on the exchanges through seven federal agencies (the Office of Education is one of them), and 36 private groups (the American Council on Education, the Institute of International Education, the National Social Welfare Assembly, the Conference Board of Associated Research Councils, to mention but a few of these).

There is still another force operating to confuse congressmen. There are some who regard educational exchanges primarily as an arm of propaganda. These want the programs taken out of the State Department and placed under the United States Infor-

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mation Agency, a semi-independent unit. Others believe the exchanges are a part of our diplomatic and cultural relations and oppose the transfer. If a congressional committee finds that people are feudin' and fussin' over a governmental activity it feels safe in cutting its appropriations.

What now for UNESCO?

► Five years ago it might have made big news. But when, on April 21, Russia's Jacob Malik walked into the Foreign Office in London to sign UNESCO's constitution, the action hardly made a ripple in the United States. There is no denying that the U.S. State Department was pleased. It issued a cautious statement, containing two points: First, Soviet Russia has a right to join UNESCO as one of the original members of the U.N.; second, the United States hopes Russia intends to abide by UNESCO's constitution.

The State Department would not say any more officially. But a number of private conversations with State Department men reveal little known facts about UNESCO and hint at the reasons Russia may have decided to join now.

State Department officials believe that the Reds are finally convinced that UNESCO is becoming effective, that they can't "liquidate it," and that therefore the only thing to do is join up.

Up to a few years ago, Russia had a clear field in intellectual propaganda. She knew how to play the game. She sent her ballet dancers, singers, actors, scientists, speakers, movies and even comic entertainers into the far corners of the world — wherever she found a vacuum. With the "art" Russia's missionaries brought propaganda. It was especially effective in Far and Near East countries.

But gradually UNESCO's missions began to exert their influence. They went to Thailand, Burma, Afghanistan, Libya and the Philippines and began to lay the foundations for improving the common schools for children and for providing badly needed fundamental education for adults. The people of those countries began to feel an affinity with the nations that brought them this help. Russia's influence declined. Russia recognized that UNESCO could no longer be ignored.

What UNESCO will be with Russia as a member is an interesting question. But this much can be said: UNESCO will not be too greatly worried about this Ivan-come-lately. It is now an organization supported by 70 countries; it has a $9 million annual budget; it has gone through several crises; it has learned from past mistakes.

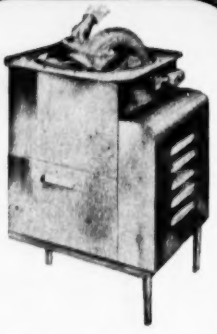
Apparently its biggest mistakes of the past have been diffusion and fragmentation and a retreat from reality. Some of its officers seemed more concerned with cataloging the ancient ruins of the world than with preventing future ruin. Hundreds of cultural, scientific and educational projects have been attempted — and some will never be finished.

There is hope that the next two years will see a change. UNESCO today is under the direction of Luther Evans, former librarian of Congress, who combines administrative skill with a sensitivity for educational problems. He is now traveling in the Near and Far East, finding out firsthand how UNESCO can be of help to peoples and governments. He will probably continue "on the go" until November, when the next general conference takes place in Montevideo, Uruguay. He is expected to place before that conference a new program with new directions.

What these new directions are to be is suggested by the thinking of the

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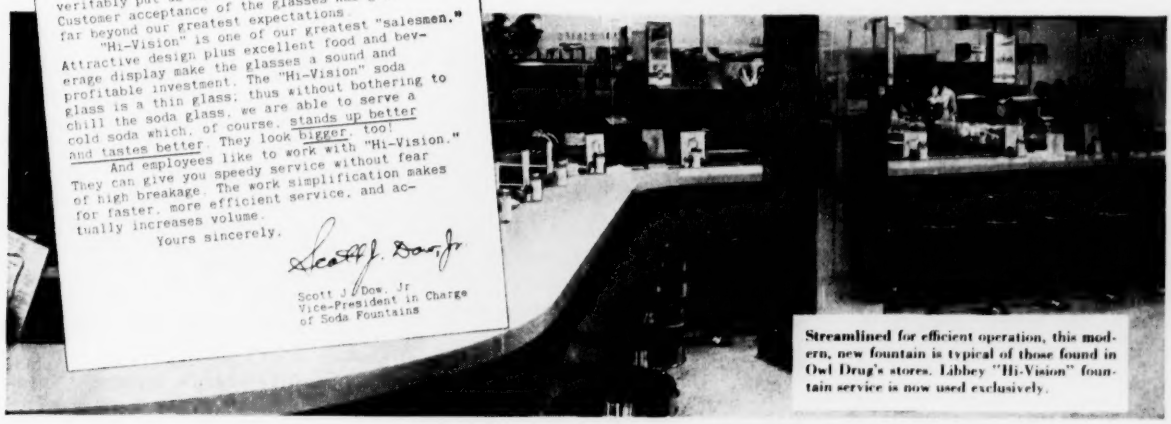
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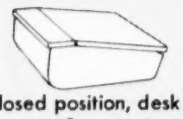
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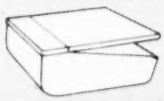


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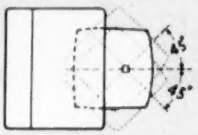
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U.S. National Commission for UNESCO. This is a group of Americans whose job is to place before the UNESCO headquarters in Paris the wishes of the American people insofar as UNESCO is concerned.

The U.S. National Commission believes that:

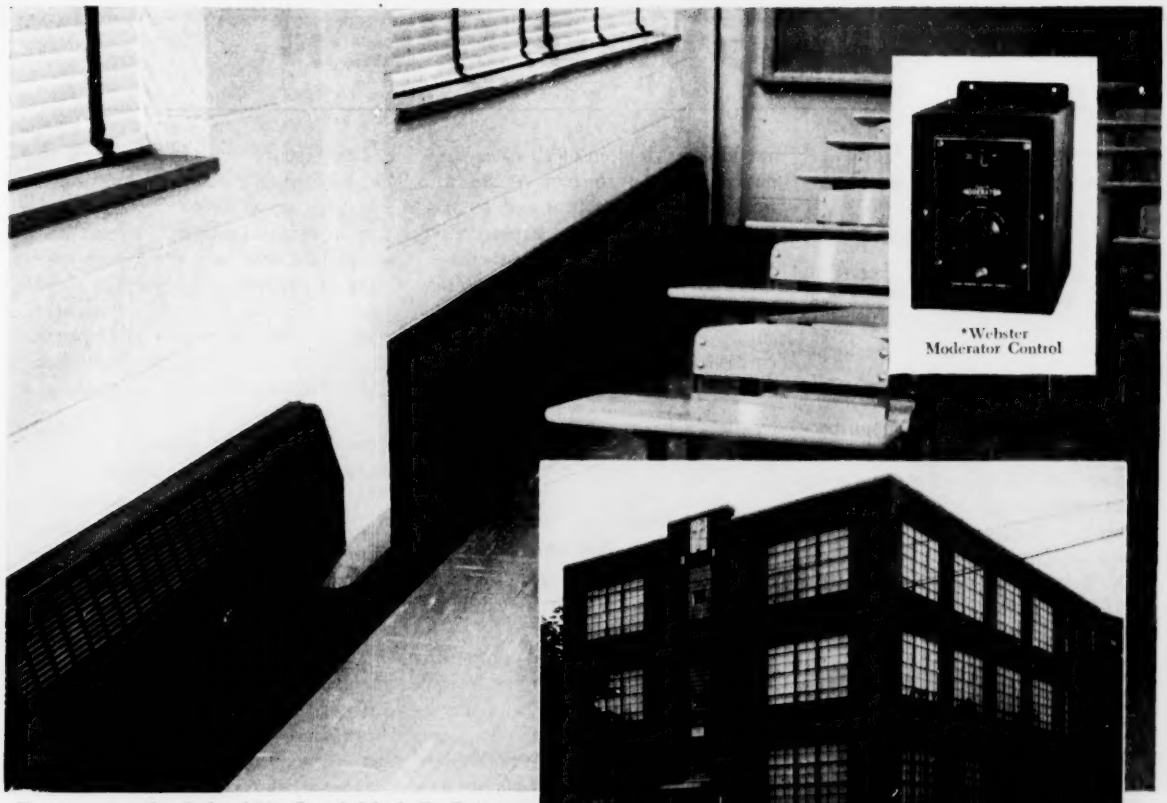
1. The major part of the UNESCO budget should go for education (rather than science or cultural projects).
2. The underdeveloped countries of the world have first claim on UNESCO's time, effort and money.
3. The main emphasis should be on action rather than on research or scholarly endeavors.
4. UNESCO should favor big projects that will be of material help to an entire people rather than scattered projects. Improvement of elementary schools should get first attention. Fundamental education for adults and ways to inculcate world understanding should also have high priority, the U.S. commission believes.

SELECT MAJOR ACTIVITIES

One member of the commission has put it this way: "We believe that UNESCO shouldn't go where it isn't asked to go. We should look over all the appeals from member states and select a limited number of major activities that would help the largest number of people. Reorganizing an elementary or secondary school system of a country is the type of thing I have in mind. The country that invites UNESCO's help should not only take part in the project but should help pay for it. UNESCO should make clear that it will help only up to a fixed date, after which the project is to be turned over to the country itself."

"Remodeling of UNESCO's program" is already a common phrase among those close to the headquarters in Paris. Even skeptics admit that the "new program" should be effective. And the biggest skeptics of all, the Russians, probably see it that way, too. It is possible that they joined UNESCO not so much because of what it has achieved but because of what UNESCO may achieve in the future under "the new program."

There is always the chance that Russia will try to use UNESCO for its own purposes. But 69 member states will keep a close watch on the Soviet delegates and their purposes when the Russians take their seats for the first time in Montevideo in an educational organization devoted to peace and freedom.



*Webster Moderator Control

Classroom view, Our Lady of Mt. Carmel School. Tru-Perimeter Heating with Webster Walvector. Sleeves in columns between windows simplify piping without loss of structural strength.

*Webster EH-10 Moderator Control unit. One of three compact, rugged units which comprise the entire steam heating control installation for this school. Other units not shown are a compact Outdoor Thermostat and a motor-operated Steam Control Valve.

Our Lady of Mt. Carmel School, Camden, N. J. Floor space, 15,311 sq. ft. Construction cost (not including land, financial and legal expenses) $200,000. Heating cost, $14,580. Architects: Gleeson & Mulrooney, Philadelphia. Consulting Engineer: William G. Flurer, Upper Darby, Pa. Heating Contractor: Fred W. Schorpp, Inc., Camden.

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NEWS IN REVIEW

Dr. Caswell to Become Head of Teachers College, Columbia

NEW YORK. — Hollis L. Caswell has been elected to succeed William F. Russell as president of Teachers College, Columbia University, and will assume the position on July 1, 1955, when Dr. Russell becomes president-emeritus.

Dr. Caswell has been dean of Teachers College since 1949. His major professional interest is in the area of curriculum. He has written widely on the problems of elementary and secondary curriculum improvement in public school systems.

Dr. Russell will reach the retirement age of 65 next year. He has been serving as administrative head of the



William F. Russell



Hollis L. Caswell

college for the last 27 years. In a statement to the faculty, Dr. Russell said, "It is a great satisfaction to know that the college will remain in general charge of one who believes in administration not as an end in itself or as a beautiful chart or theoretical plan but as the best way to facilitate the work of students, the effectiveness of professors, the advancement of scholarship and research, and usefulness to children and teachers in schools and other educational institutions."

Dual System of Public Schools Proposed in South Carolina

COLUMBIA, S.C. — A dual system of mixed and segregated schools has been proposed by South Carolina's lieutenant governor, George Bell Timmerman Jr., as a solution to the possible outlawing of racial separation in public schools. This outlawing may result from the decision of the U.S. Supreme Court on the suit challenging the constitutionality of state laws requiring separate schools for white and Negro children.

The proposed system would establish a system of mixed schools to be attended by children of all races without distinction as to color. At the same time, separate schools would be provided upon petition of a representative proportion of citizens of either race in a given county or school district.

Both categories of schools would be supported at public expense, and the curriculums, instruction and physical facilities would be the same as they are in the present public schools. Attendance at either type of school would be a matter of individual choice.

Nevada Professor Reinstated on Academic Freedom Grounds

RENO, NEV. — A professor's academic freedom has been upheld by the Nevada supreme court.

Frank Richardson had been dismissed from the University of Nevada in June 1953 on charges of insubordination, lack of cooperation, and conduct not in accord with the welfare of the university. Dr. Richardson, a biology professor, had distributed to faculty members copies of an article by Arthur E. Bestor, professor of history, University of Illinois. The Bestor article was critical of "professional education."

The regents' attitude, according to Dr. Richardson's attorneys, constituted an attack on academic freedom, and they maintained that he had been discharged because he had opposed lowering of entrance standards. The court asserted that Dr. Richardson's remarks showed "some degree of impropriety or lack of taste," but said that they did not constitute cause for removal.

Talmadge Paper Attacks Ford Foundation in South

ATLANTA, GA.—The Ford Foundation has been charged with undermining the southerner's way of life.

An unsigned article in the Atlanta newspaper, the *Statesman,* GOV. Herman Talmadge's political weekly, criticized a recent grant of $240,000 by the Ford Foundation to the Southern Regional Council, organized in 1944 to work for better race relations. Members are whites and Negroes.

The article criticized the grant on the grounds that since the foundation was tax free "the money that we in the South pay in federal income taxes, in effect, goes to support this organization which is working night and day to destroy our way of life."

New Chicago Headquarters for National Congress of Parents and Teachers Completed, Occupied

CHICAGO. — New headquarters for the National Congress of Parents and Teachers at 700 North Rush Street, Chicago, opened for work April 5. This transfer from rented quarters in Chicago (to which the organization moved 15 years ago from its previous headquarters in Washington, D.C.) was hailed by its national president,

(*Continued on Page* 124)





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Mrs. Newton P. Leonard of Providence, R.I., as "the biggest project of the P.T.A.'s second half century." This is the first time in the 57 years of its existence that the National Congress of Parents and Teachers has occupied a building constructed exclusively for its own purposes.

"The P.T.A. will gain added prestige and security from owning its own home," Mrs. Leonard said. "The new building is a symbol of the concern all persons have for all children. It gives us roots, and it will make people realize we have a stable, permanent program."

Completion of the building—a $750,000 modern structure — marks the culmination of nearly seven years of planning and four and a half years of fund raising among some eight million P.T.A. members in local associations across the country. Since the Golden Jubilee convention of the national congress in 1947, when the urgent need for larger quarters was pointed out, a special committee has been working on this project. The building site on the near north side of Chicago was purchased in October 1949, and ground was broken Jan. 21, 1953.

"Quarters for Headquarters" was adopted as the slogan for the national headquarters fund, and the more than $600,000 received by April 15 was literally made up of quarters and dimes and dollars. That so large a sum was raised from these small contributions was declared "phenomenal" by Mrs. Leonard. P.T.A.'s and state congresses of parents and teachers are still sending in gifts.

OFFICIAL DEDICATION IN 1955

A permanent staff of about sixty persons is already carrying on the organizational and publishing program of the National Congress of Parents and Teachers at the headquarters. The president, Mrs. Leonard, cut the ribbon across the entrance to the building recently to symbolize its actual completion. The official dedication, however, will not take place until May 1955, when the annual convention of the national congress will be held in Chicago.

Plans were drawn specifically to meet the needs of the parent-teacher organization. On the third floor are the editorial offices for national congress publications, including its official magazine, the *National Parent-Teacher*. Working and administrative offices are on the second floor, along with the library. On the first floor are a large reception room, the office of the national president, and a conference room for the executive committee as well as the circulation department of the *National Parent-Teacher* and the organization's shipping division. A lunchroom, fully equipped kitchen, recreation room, and first-aid room are in the basement.

SERVES 30 COMMITTEES

The National Congress of Parents and Teachers carries on its program of cooperation between parents and teachers for the welfare of children through 30 national committees concerned with such fields as health, home and family life, juvenile protection, parent education, and safety. These committees have their counterparts in the 50 state congresses of parents and teachers (in all 48 states, the District of Columbia, and Hawaii), and in the 39,000 local P.T.A.'s. The national congress also conducts many nationwide projects.

(*Continued on Page* 126)



Century-Old School Discovers New Economy in Dinnerware

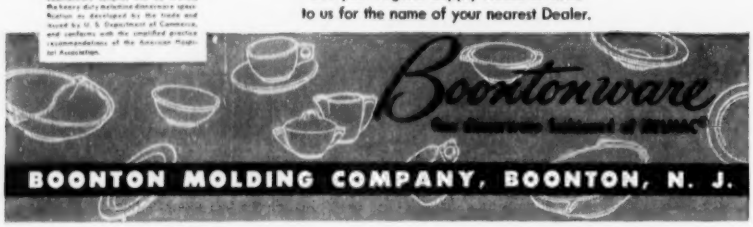
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NEWS

(*Continued From Page* 124)

An expanded parent education program is being conducted to develop effective parent and family life education programs within the states. A national field service, available to state congresses on request, is directed toward strengthening parent-teacher work in all areas. The new headquarters also houses the association's extensive publishing program, including its magazine, a national bulletin, books, pamphlets and reprints.

Stanford Institute Studies Tomorrow's Secondary Schools

STANFORD, CALIF.—"Planning for Tomorrow's Secondary Schools" is the theme for the fourth annual School Planning Institute at Stanford University July 12 to 16. The one-week program will be concerned with major trends and problems in secondary school planning and building, including specifications, curriculum and economies of construction. Emphasis will be on the improvement of learning situations through better planning of the total environment.

Principal speakers, in addition to several members of the Stanford staff, include: Harold Alberty, professor of secondary education, Ohio State University; Arthur H. Rice, editor, The NATION'S SCHOOLS; Darell B. Harmon, educational consultant, Austin, Tex.; Doyt Early, Frank B. Lindsay, M. Eugene Mushlitz, George W. Ormsby, and W. Earl Sams of the California State Department of Education, and several California architects and school administrators.

Salt Lake City Citizens Okay Tax Raise for Teacher Salaries

SALT LAKE CITY, UTAH.—The teachers here, who a few months ago were considering a general strike for higher salaries, apparently have won an average $500 wage raise through a tax levy election which squeaked by with a 480 vote margin.

At the same time the tax levy was approved the Salt Lake City voters gave overwhelming support to a $4,400,000 bond issue for school construction purposes. Approval of the bond issue will mean a start on four new schools and a number of additions and remodeling jobs.

Salaries for teachers next year will begin at $3120 a year, with a maximum of $4800. Approval of this

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measure was won in spite of vigorous opposition by J. Bracken Lee, governor of Utah. In a post-election statement Governor Lee referred to "school lobby forces" which he said were "well organized, skilled in the art of propaganda" and buttressed by newspaper support and advertising funds.

A.A.S.A. Sponsors Meeting of State Presidents

ST. LOUIS.—Presidents of school administrator organizations in 39 states held their annual meeting here April 29 to May 1.

Meeting simultaneously were journalists representing magazines and newspapers especially interested in education from seven states in this south-central region.

The traditional joint meeting of the two groups took the form of a panel, with three newsmen and three administrators discussing "the flow of news." Moderator for the panel was Arthur H. Rice, editor of The NATION'S SCHOOLS. Chairman was Jordan L. Larson, superintendent of schools at Mount Vernon, N.Y., and president of the A.A.S.A.

In a press conference, President Larson and Worth McClure, executive secretary of the A.A.S.A., questioned how the proposed national and state conferences on education can reveal any information that comprehensive studies during the last three years have not already provided. They pointed out that studies by state education departments and by the U.S. Office of Education have established the need for 312,000 new classrooms to house approximately nine million pupils.

They also advised the press that the need for new teachers continues to be critical. Some 85,000 elementary teachers are needed when schools resume this fall, yet only 35,000 trained graduates will come from colleges and universities this year.

Free Discussion in Schools Endorsed by U.S.C.C. Head

WASHINGTON, D.C. — Freedom of inquiry and discussion in the schools is advocated by Richard L. Bowditch, president of the United States Chamber of Commerce.

"This nation was conceived and rose to world leadership on the ideas of nonconformists and free-wheelers, of men and women of integrity and wide vision, of individuals with bold,



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NEWS

far-reaching minds, who insisted on crossing the frontiers of the unknown," Mr. Bowditch said. "They dared to disagree on many things, but our country and our culture are infinitely richer and stronger for their challenge."

In his address before the annual meeting of the national business group, Mr. Bowditch said that a stronger school system should be America's "first line of defense against freedom-killing communism and the danger of an all-consuming World War III."

Catholic Educators Favor Closer Cooperation With Public Schools

CHICAGO. — Catholic school officials reviewed problems in education and agreed with their public school colleagues on many current issues at the 51st annual meeting of the National Catholic Educational Association here April 21 and 22.

An important issue in the mind of all Catholic educators was the extent to which they should cooperate with the public school system in the matter of teacher accreditation. Another question was what position should be taken with regard to current developments in teacher education.

It seemed necessary and profitable in the minds of most Catholic educators to continue the pattern of cooperation between parochial and public schools that has become established. Cooperation with the new Council on Accreditation for Teacher Education was advocated.

Urban H. Fleege, staff associate, speaking to the delegates, said, "We quite frankly face the fact that some of these organizations do not share our philosophy of education. . . . A new pattern of teacher education is being developed. There is wholesome unrest stirring within many of the secular educators interested in improving teacher preparation and raising standards in the teaching profession. Many of these leaders are now insisting on a broad liberal education as basic in the preparation of a teacher.

"If we in Catholic education," he continued, "choose to let our parochial attitudes dominate our thinking, if we refrain from participating in the various encouraging developments in the field of teacher education, we will be depriving ourselves of an unparalleled opportunity for influencing the future of American education. If we have



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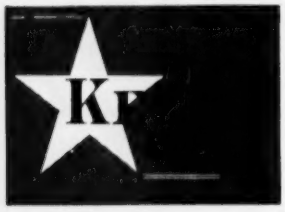
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NEWS

anything of particular value to contribute to the improvement of teacher education, and I think we have, we now have the opportunity to come forward."

Other major problems confronting parochial schools are similar to those of the public schools: shortages of building facilities and teaching staffs, complicated in some places by rapid growth of suburban areas and the need for special facilities for children with particular physical, emotional or mental problems.

The enlarged enrollment of pupils and the expansion of suburban areas has overcrowded existing school buildings and created need for additional ones. New buildings for the grades and for high schools are needed. However, funds for this purpose are generally available from the parishes. It was estimated that the number of schoolrooms will have to be increased by half in the next 10 years in order to meet the needs of the increased enrollment.

More pressing than the lack of schoolroom space is the lack of teachers. The shortage of teachers in Catholic schools will necessitate increased use of lay teachers, for there are not enough trained clerical teachers to fill all the positions created by the expansion of the school system. A salary schedule for teachers, comparable to that in the public schools, will place an additional burden on parish finances.

Resolutions adopted by the delegates at the termination of the meeting emphasized the rôle of the school as a tool in the preservation of free thought. "Catholic schools on all levels of instruction should resist conformity to thought which aims to standardize our attitudes, reduce critical judgment, and abdicate reason in obsequious assent to unworthy patterns of present-day thinking," one of the resolutions stated.

Kalamazoo, Mich., Adopts Unified Plan of Organization

KALAMAZOO, MICH. — A unified plan of organization has been adopted here. Under the previous system both the superintendent and the school business manager were directly responsible to the school board.

Kalamazoo's new plan becomes effective on July 1, according to Loy Norrix, superintendent.



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NEWS

Superintendents Given Special Invitation to "Come One, Come All" N.E.A. Convention

NEW YORK. — The N.E.A.'s first post World War II "Come One, Come All" convention will be held here June 27 to July 2. From 15,000 to 20,000 teachers and friends of education are expected to attend.

A special invitation to superintendents of schools has been sent by William A. Early, N.E.A. president and superintendent of schools for Chatham County, Georgia, through the office of the A.A.S.A. in Washington. "Superintendents have a big stake in the affairs of the National Education Association," said Mr. Early. "We believe that this great meeting can provide a rallying point for education at this time which will help us to meet the problems and challenges that lie before us."

The major sessions will be held in Madison Square Garden, with some meetings being scheduled in the United Nations Assembly Hall. These meetings will feature discussions of the United Nations and its rôle in war, peace and education. The ingenious simultaneous translation equipment will be demonstrated. Also planned is a comprehensive program of tours of the U.N. headquarters.

The 1954 meetings will feature another post World War II "first." Commercial exhibits showing new technics, working materials, and teaching aids will be a part of the program proceedings.

Prominent speakers scheduled to appear include John Foster Dulles, the Secretary of State; Dag Hammarskjold, secretary-general of the United Nations; Ralph Bunche, director of the trusteeship division, United Nations secretariat; President Grayson Kirk of Columbia University; Mayor Robert F. Wagner Jr. of New York City, and many other prominent lay and professional leaders.



Grayson Kirk



Ralph Bunche

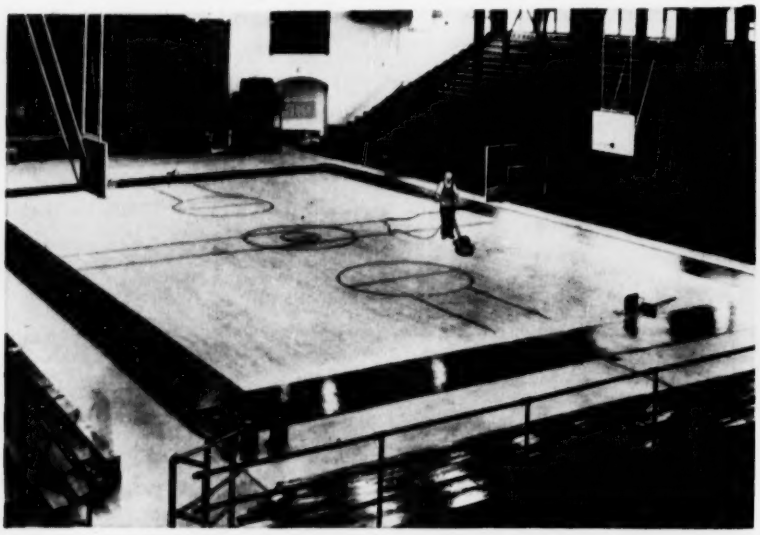
Many regular N.E.A. convention features are planned, too—the state headquarters open house on Thursday evening, the celebrities dinner (this year at the Waldorf Astoria Hotel), sectional meetings and discussion groups, as well as open meetings of N.E.A. committees and commissions.

N.E.A. members are urged to stop in Washington at the association's headquarters on the way to or from New York this summer.

All Three Regional A.A.S.A. Meetings to Have Exhibits

WASHINGTON, D.C. — Commercial exhibits are planned for all three A.A.S.A. regional conventions in 1955.

Exhibits will include school books, supplies, equipment and school building architectural exhibits, according to Worth McClure, executive secretary of the association. Dr. McClure's announcement gave the dates of the 1955 conventions: St. Louis, February 26 to March 2; Denver, March 12 to 16; Cleveland, April 2 to 6.



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Would you like to get extra years from your present gym floor? Even though it may be old and worn, you can prolong its useful life for many years with Seal-O-San Gym Floor Finish.

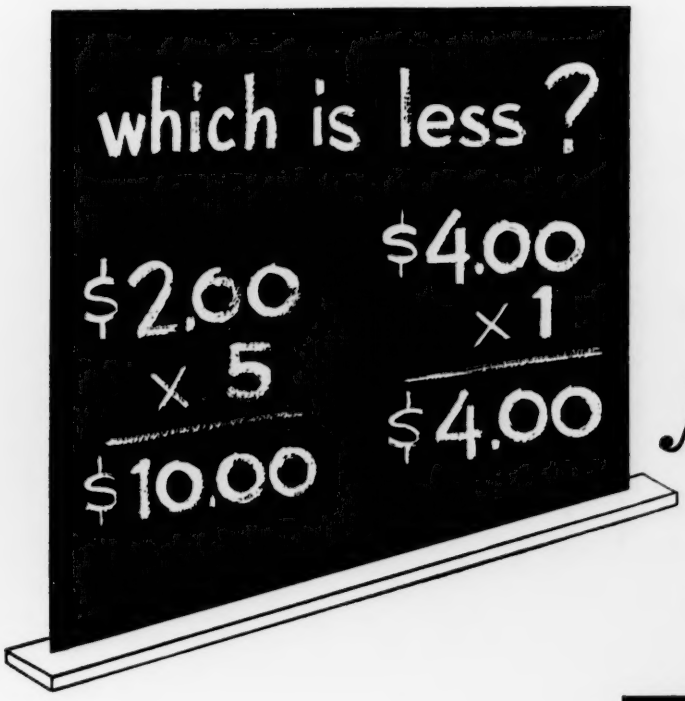
Either sand the floor or remove the old finish with Wade Seal and Varnish Remover. Then apply Seal-O-San. You save the expense of a new floor, and have a non-slippery, glare-free playing surface at low cost.

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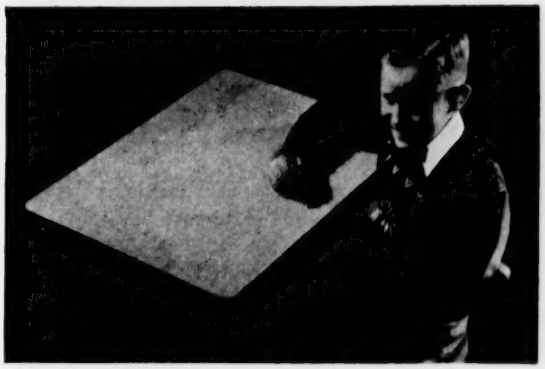


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This simple bit of arithmetic on our blackboard started many school officials doing some quick figuring. When they projected it on the basis of 500, 1000 or several thousand desks, they came up with some highly gratifying results.

School desks, to be kept in satisfactory condition, must be refinished every two years. At an average cost of $2.00, it means refinishing five times in a 10-year period at a cost of $10.00 per desk.

On the other hand, replacing with a NATCOLITE top means an investment of approximately $4.00 per desk. (This will vary slightly according to quantity, dimensions, freight, etc.) This is done once and once only—not just for ten years but for the life of the desk! In cold dollars and cents, the economy is obvious. But there are many "plus" factors obtained with this top. Surfaced with Nevamar high-pressure laminates, the NATCOLITE top immediately gives the classroom a bright, cheerful and modern appearance. Daily maintenance disappears, because a NATCOLITE top will not stain or scar. Ink, paint and crayons wipe away with a damp cloth. The surface is specially designed for minimum light reflectance and the Wynene plastic edge protects the top against lateral impact. It is made in Honey Maple and Silver Maple finishes.



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NEWS

School Business Officials Plan Special Train for Trip to Annual Meeting in Los Angeles

KALAMAZOO, MICH.—"Go West, school business official, to the program in Los Angeles, October 10 to 14," counsels Harley W. Anderson, secretary-treasurer of the Association of School Business Officials of the United States and Canada.

"Join our special train in Chicago or Kansas City, if you wish; see the West in the company of your fellow schoolmen, and enjoy the special hospitality of the California School Business Officials Association."

A record breaking attendance is expected at this 40th annual meeting of the A.S.B.O., which will be a joint meeting with the California state group. All programs and exhibits will be housed in the Hotel Statler.

According to present plans, the special train will originate in Chicago on Thursday noon, October 7, making connections to pick up special cars at Kansas City, and will follow a southern route to the West Coast. Returning via a northern route, the train will leave Los Angeles Thursday, October 14, at midnight.

The program itself opens Sunday evening, October 10, with a musicale, followed with one general session on each of three succeeding days alternating with one or two section meetings for eight sectional groups.

There will be two programs each for the section groups concerned with purchasing, personnel, and finance and accounting. One section program each is scheduled for the general topics of cafeteria management, schoolhouse planning and construction, maintenance and operation, and transportation.

In place of a second program, the maintenance and operation group will make trips to see playgrounds and athletic fields of Los Angeles high schools, to visit shops in Pasadena, and to observe furniture refinishing in Glendale.

The schoolhouse planning group will visit the new high school at Arcadia. The cafeteria section will plan a trip to observe school feeding facilities in Los Angeles and elsewhere.

The maintenance and operation section will hold a luncheon at which the program will be concerned entirely with playground surfacing.

In place of the annual banquet, the entire delegation will ride to the San Fernando Valley for a western style barbecue. Wandering minstrels and a custodians' quartet will provide entertainment. Other musical groups to be heard at the convention include the Tournament of Roses band from Pasadena City College and the a cappella choir of Long Beach City College.

Wives attending the convention will be guests of the California association for trips to Hollywood and Beverly Hills and for other entertainment.

On the field trips and the trip to the San Fernando Valley the visitors will ride in the fleet of transit type buses owned by the Los Angeles city school district.

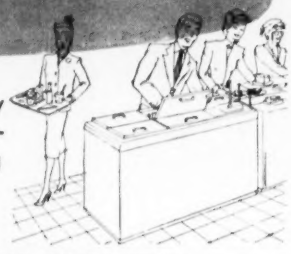
Speakers who have accepted invitations for the general programs include John Morley, newspaper columnist, and S. M. Brownell, U.S. Commissioner of Education, both of whom

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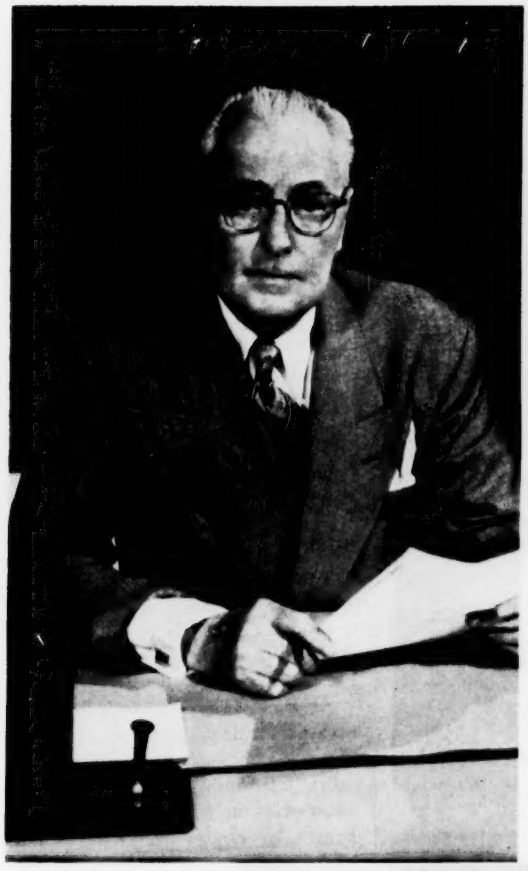
Dual-Type control makes possible either wet or dry operation by a simple twist of the knob. Makes and releases ice automatically when operated wet giving long hold-over periods for peak loads. When operated dry, temperatures next to freezing can be maintained if desired. Convenient drain outlets are included.

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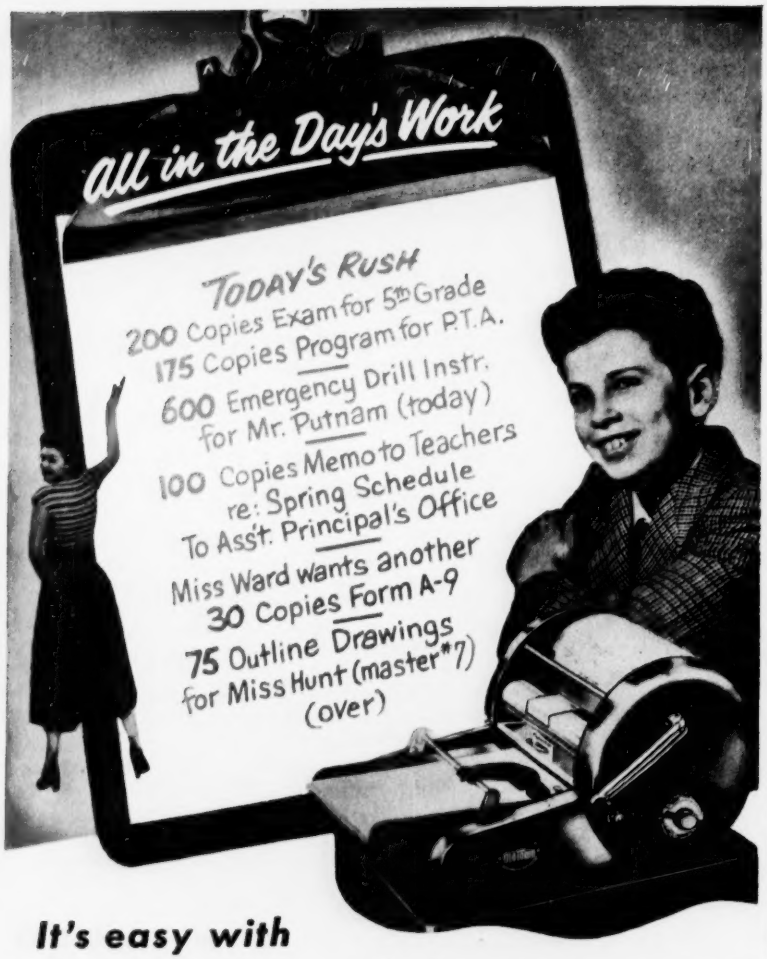
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NEWS

will be heard at the Monday morning general session. At the Wednesday afternoon general session D. Lloyd Nelson, professor of educational administration at the University of Southern California, will tell "How School Business Officials Can Avoid Ulcers and Heart Attacks," and M. J. Rand, assistant superintendent of the Paramount school district in California, will outline "A Policy Approach to School Business Management."

The annual business meeting has been moved forward to the second day of the convention. S. C. Joyner, deputy business manager of Los Angeles city schools and president of the A.S.B.O., will preside.

Michigan Business Officials Plan Regional Meetings

DETROIT.—The 17th annual meeting of the Association of Michigan School Business Officials was held at Detroit April 7 to 9.

At the opening session Elliott C. Spratt, president of the National Producers Council, spoke on the buyer-seller relationships and pointed out many ways in which both groups can benefit by establishing a good basic relationship.

A round table on purchasing and finance was conducted by Carroll Crawford, assistant superintendent of Kalamazoo schools. Too, there was considerable discussion on assessment procedures, evaluation of properties, and the encumbrance accounting method. It was the consensus that the last named method is cumbersome and requires much paper work.

Another subject that came in for considerable attention at this round table was quantitive buying for groups of school districts. In several areas in Michigan groups of districts have combined their purchasing to great advantage. At the close of the meeting a recommendation was approved that the directors of the association organize regional meetings throughout the state for business managers, accountants and purchasing agents at a time in the year that would not interfere with the state meeting.

A round table on employment practices was conducted by Richard B. Warren, assistant superintendent of Muskegon schools. Mr. Warren and his committee had conducted a survey of the state's 167 school districts, in which they had gathered information



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on salary schedules, hours of work per week on different levels, vacations and so forth, and the implication of these various subjects to the community.

A round table on maintenance and operation was conducted by Ed Murdock, assistant superintendent of Highland Park schools. Here were discussed the training of maintenance personnel, and the establishing and maintaining of good safety habits; the conclusion was that the biggest single factor in a safety program is good housekeeping.

A. D. Brainard, assistant superintendent of Dearborn schools, conducted a round table on insurance. At that meeting schoolmen were told of the advantages to the community and to the insurance companies if, instead of buying insurance from local brokers, the schools will organize all of the local brokers into an association and distribute the insurance among that group; better coverage for the community is thus possible and better public relations can be maintained. Statutes are placing more and more liability on local school districts, it was pointed out, and school districts should look into the possibility of general coverage for liability.

Plans and specifications for new buildings should be submitted to an insurance rating bureau by the school district prior to construction. These bureaus are able to point out many features that can be built into new buildings to reduce hazards and make possible an equal amount of insurance protection at a lower rate. The service from these bureaus is free.

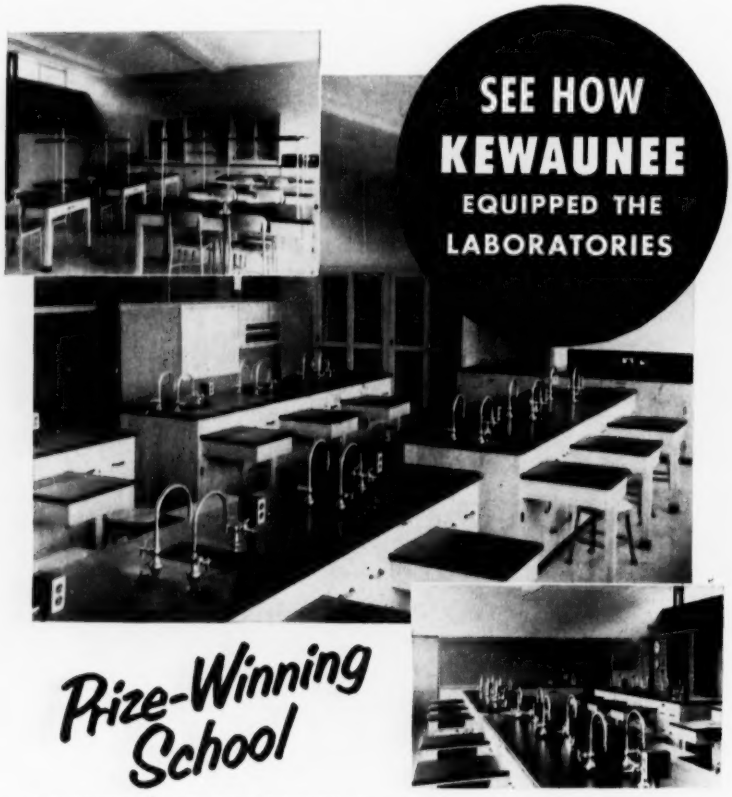
A round table on custodial training and scheduling was conducted by Alfred C. Lamb. Before custodial schedules can be made it is necessary to set up a standard of cleanliness, and this standard must be determined in consultation with the superintendent of schools or someone of his staff, the discussion group heard. Together with the superintendent, the chief custodian and the chief engineer should determine how many times a week, month or day various housekeeping operations should be performed. Once this standard is set up, the chief custodian and chief engineer can schedule their services to maintain such a standard. A formula was given for the assignment of work hours, which consisted of a number of work units to be assigned to each custodian.

Officers elected are: president, Glen Loomis, superintendent of schools, Traverse City; vice president, Richard B. Warren, assistant superintendent of schools, Muskegon, and secretary-treasurer, Alfred C. Lamb, director of buildings and grounds, Wayne University. Directors are Harold E. Brown of the state department of public instruction; Jack Elzay, superintendent of schools, Ann Arbor, and J. Harold Husband, director of administrative services, Grosse Pointe public schools.

The association's 1955 meeting will be held in Grand Rapids April 13 to 15.—*Reported by* A. C. LAMB.

Four Nations Cooperate to Produce Educational Films

NEW YORK. — Films for schools are being produced jointly in a new international project by Great Britain, France, Belgium, and the Netherlands. Cooperation and shared expense will make it possible to issue films on the physical geography of these countries, a subject much in demand.



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ABOUT PEOPLE

SUPERINTENDENTS . . .

Arthur Dondineau, Detroit superintendent, has accepted a three-year renewal of his contract, at an undetermined increase in salary, expiring June 30, 1957.

Walter A. Kearney, associate director, placement service, Pennsylvania State University, is to become superintendent at New Castle, Pa.

Donald S. Keeler, superintendent at Perry, N.Y., has been appointed superintendent at Elmira, N.Y.

Jerome J. Brainerd, superintendent for Lewis County, Copenhagen, N.Y., has retired after 39 years in the profession.

Fred Doenges Thompson, principal of Thomas Dale High School, Chester, Va., will become superintendent for Chesterfield County, Chesterfield, Va.

William Wolter, formerly a teacher at Lansing and Goodell, Iowa, is now superintendent at Hansell, Iowa. He succeeds **Melvin B. McCurdy,** who has been appointed superintendent at Jewel, Iowa, succeeding **B. T. Johnson,** who resigned.

Walter J. Herrington, supervising principal at Williamsville, N.Y., has retired. Mr. Herrington had been in the school system for 30 years.

George E. Bettinger, superintendent at Alhambra City, Calif., since 1934, has resigned, effective September 16.

E. E. Erickson, principal of Baraga Township schools, Baraga, Mich., has been appointed superintendent there.

Edwin S. Hopson, superintendent for Herkimer County, Dolgeville, N.Y., has retired after 30 years of service.

William J. Transue, supervising principal at Fultonville, N.Y., will be superintendent at Stillwater, N.Y.

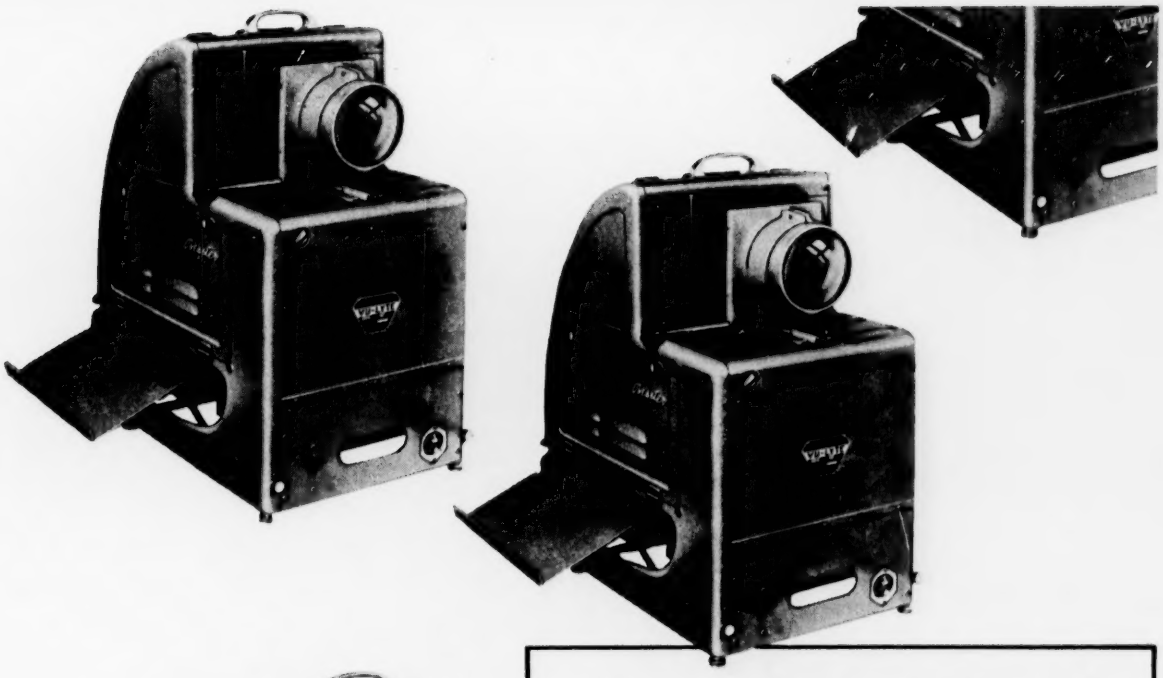
John A. B. MacAuley has been appointed superintendent of Crawford County schools, Grayling, Mich.

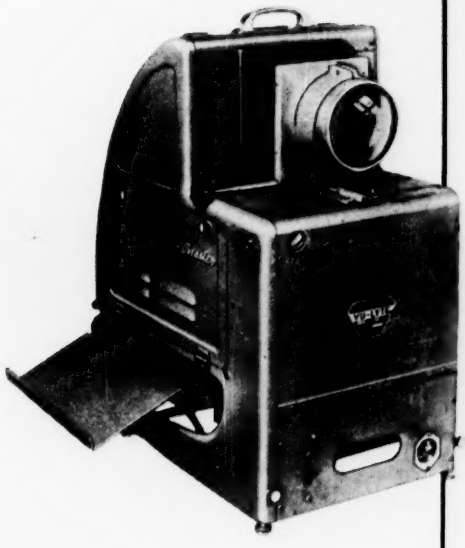
Richard T. Beck, assistant superintendent at Jersey City, N.J., will be superintendent at Freehold, N.J.

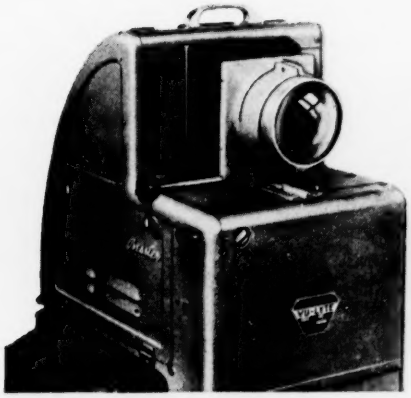
James T. Jones, supervising principal at Stowe, Pa., will become supervising principal for the Susquenita school district, comprising Perry and Dauphin counties in Pennsylvania.

Harvey B. Scribner, formerly superintendent at Hartland and Eastport, Me., is now superintendent at Dedham, Mass.

A. Mendenhall, superintendent at Guide Rock, Neb., has been appointed superintendent at Otterville, Mo.







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NEWS

Perry J. Jorn, coach and teacher at Stella, Neb., will be superintendent at Plymouth, Neb., for the 1954-55 school year.

John J. Forrester, supervising principal at Uniondale, N.Y., will be superintendent of Uniondale's new village district.

Edwin Barbour, principal of the high school at Eagle Grove, Iowa, will become superintendent of the Eagle Grove schools, succeeding **R. W. Wilson,** who has resigned.

J. F. Morrissy, superintendent at La Grange, Mo., will become superintendent at Vandalia, Mo.

Harlan S. Lippert, principal of the high school at Beeler, Kan., will succeed **James Corey** as superintendent at Walton, Kan. Mr. Corey has accepted the high school principalship at Marion, Kan.

Frank Monroe, superintendent at Midland, Tex., will succeed **W. B. Irvin,** retired, as superintendent at Highland Park, Tex. Mr. Monroe, the current president of the Texas Association of School Administrators, has been at Midland since 1941.

Earl W. Carson, principal of the high school at Greensboro, Ga., will become superintendent at Monroe, Ga., July 1. He will succeed **N. R. Haworth,** who will become superintendent at Elberton, Ga.

H. Lawson Smith, superintendent of the Herlong Elementary School District, Herlong, Calif., will become superintendent at Lodi, Calif. He will succeed **Leroy Nichols,** who is retiring, effective July 1.

Bernard H. Voges, assistant director of school finance for the Missouri State Department of Education, was elected president of Missouri's association of school business officials.

W. P. Sprayberry, superintendent of Cobb County schools, Marietta, Ga., has been elected president of the Georgia Education Association.

Frank W. Richardson, for 20 years superintendent at Henrietta, Tex., has resigned. Mr. Richardson has been secretary of the Texas Association of School Administrators for five years.

L. G. Keith, superintendent at Independence, Mo., for the last seven years, has announced his resignation, date effective at the decision of the school board.

Lloyd W. Ashby, recently appointed assistant superintendent for the Cheltenham Township schools, Elkin Park, Pa., will become superintendent on July 1, succeeding **Frank C. Ketler,** who is retiring. **Edwin B. Keim** has succeeded Dr. Ashby as principal of Cheltenham High School.

IN THE COLLEGES . . .


Robert L. Hopper

Robert L. Hopper is now director of field services for the school of education, Michigan State College. Dr. Hopper has been director of the bureau of school services and chairman of the department of educational administration at the University of Kentucky since 1950. He was formerly director of finance for New Hampshire's department of education.


Francis S. Chase

Francis S. Chase has been named chairman of the department of education, University of Chicago, succeeding **Maurice Seay,** now educational director of the Kellogg Foundation, Battle Creek, Mich. Dr. Chase, former editor of the *Virginia Journal of Education,* has been director of Midwest Administration Center (C.P.E.A.) since 1951.

Robert H. Anderson, superintendent of the elementary schools at Park Forest, Ill., will join the staff at Harvard University as director of elementary school apprentice teaching.

Judson T. Shaplin will become associate dean of the faculty of education at Harvard University on July 1.

James A. Lewis, who recently resigned as superintendent at Dearborn, Mich., to become director of the bureau of school services at the University of Michigan, has been appointed vice president of student affairs at the university. He will assume his new responsibilities July 1.

Clifford C. Furnas will become chancellor of the University of Buffalo September 1, succeeding **T. R. McConnell,** who resigned on February 1 to conduct a survey on higher education in California. Dr. Furnas has been executive



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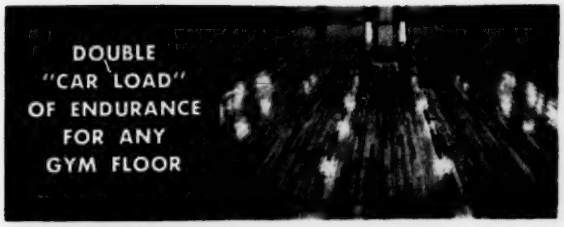


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Because the molecules of TROPHY finish are so much larger than the old type finishes, a heavier film is produced with less solids. Therefore your TROPHY finish can be spread thinner, actually twice as far, for double the coverage.

• ABRASION TEST PROVES LONGER LIFE

TROPHY'S abrasion index (ability to stand use and wear) hits a new high of 854 as compared to 355 held by the toughest finish known to date. Proof that TROPHY gives more than twice as many years' service as the best finish on the market.

• LIGHTEST, NON-DARKENING FINISH CONTROLS LIGHT REFLECTIVITY

Its silking appearance of a mat finish, "breaks up" light rays, reducing glare, providing better diffusion, and maximum light for action play and crowd viewing.

• SLIP RESISTANT FOR FAST ACTION CHAMPIONSHIP PLAY

TROPHY'S smoother finish is slip-resistant with a high co-efficient of friction that assures safe footing, reduces muscle strain for players.

• INCREASES COVERAGE, CUTS FINISHING COSTS

With TROPHY treatment you use only 1 coat of *finish*. Because of this specification, and the increased coverage type solvent, TROPHY treatment costs you LESS in material costs and labor time.



Hillyard Maintaineers are "on your staff, not your payroll" for free floor advice and help. There's one near you.

HILLYARD CHEMICAL CO., St. Joseph, Mo.

Passaic, N. J. San Jose, Calif.

Branches in Principal Cities

MAIL COUPON FOR TROPHY FACTS

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St. Joseph, Mo.

..... Please have the Hillyard Maintaineer call, advise how I can give my gym the NEW TROPHY LOOK.

..... Please send my free copy of the new revised gym layout and lining file folder.

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Institution .....

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FOLDING CHAIRS ARE

strongest...last longest!

There's a Samsonite folding chair or table for every school need...whether you want to convert the lunch room to a meeting hall in minutes, or just want comfortable seating in classrooms. Samsonite's longer service means long-run economy.



SAMSONITE FOLDING BANQUET TABLE. Greater strength with reduced weight. Sets up quickly, stores compactly. Safe! Legs *lock* open, *can't* fold accidentally. Masonite or Lifetime-Plastic tops. 6 ft. (#4600) and 8 ft. (#4800) lengths, 30" wide.

Only Samsonite gives you all these EXTRAS AT NO EXTRA COST!

- Tubular steel construction
- Easy, one-finger folding
- Safety-Guard Hinges
- Compact storing
- "Automobile" finish
- Bonderized to resist rust
- Posture-Curved Comfort
- Won't tilt or wobble
- Low in cost



SAMSONITE WOOD-SEAT FOLDING CHAIR is ideal steel chair for meeting rooms and auditoriums. 5-ply seat of blonde hardwoods, durably bonded, is gracefully curved for comfort. #2025.

SHWAYDER BROS. INC. Samsonite FOLDING CHAIR

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WRITE FOR A SAMPLE CHAIR on your letterhead. Try it, test it, see how this Samsonite all-steel folding chair stands up. No obligation.



Special Quantity Prices from your Samsonite Distributor; or write for further information directly to the factory.

SHWAYDER BROS., INC., PUBLIC SEATING DIVISION, DEPT. 5F, DETROIT 29, MICHIGAN

Also makers of famous Samsonite Luggage and Card Tables and Chairs for the home

NEWS

vice president and director of the Cornell Aeronautical Laboratory since 1946. He will be the ninth chancellor of the university since its founding in 1846.

Barton Kline, superintendent at Beatrice, Neb., has been named president of Chadron State Teachers College, Chadron, Neb. Dr. Kline will succeed **Wiley G. Brooks,** who has resigned.

W. H. Crawford, superintendent of schools at Dodge City, Kan., will become an associate professor at Washington State College.

Guy Scott, dean of men and teacher at the College of Emporia, Emporia, Kan., will become dean of the college there.

R. A. Harbour, superintendent at Porterville, Miss., will become president of East Mississippi Junior College.

J. Howard Kramer, president of Southern State Teachers College at Springfield, S.D., will become head of the department of education and psychology at South Dakota State College.

Anthony J. Capuano is now assistant in school business management at the University of the State of New York.



John C. West

John C. West, president of the University of North Dakota since 1933, has retired. Dr. West served as superintendent at St. John and Webster, N.D.; at Barnesville, Renville, Sauk Center, and Bemidji, Minn., and at Grand Forks, N.D.

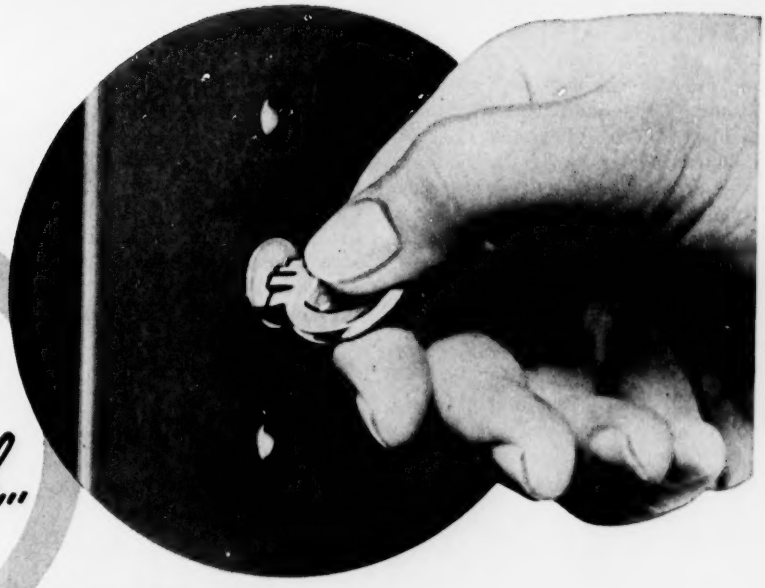
Ralph F. Weston, member of the faculty of Fitchburg State Teachers College, Fitchburg, Mass., has been named president of the college.

Charles A. Norford will join the staff of the school of education of Michigan State College. Mr. Norford will also take part in the development of visual aid programs for the schools of East Lansing through the Audio-Visual Center.

Hilton C. Buley, commissioner of education for the state of New Hampshire, has been appointed president of New Haven Teachers College, New Haven, Conn. He will succeed **Warren G. Hill,** assistant to the president of the college, who has been acting president since **S. M. Brownell** resigned last October to become U.S. Commissioner of Education.

Donald Leu has been appointed to the faculty of the school of education at Michigan State College. Dr. Leu,

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THE SECRET OF
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BERGER'S revolutionary new handle-free Steel Locker



The key is the handle! The key unlocks the door, and serves as a handle for opening it. The door *pre-locks* when key is removed, and locks *automatically* when shut. Students cannot "forget" to provide full-time locked protection for books, clothing, equipment, and personal effects. The school administrator retains a master key.

Berger's *exclusive* Key-Control locker system completely eliminates all need for handle maintenance. Locker fronts are flush and smooth, with no noise-inviting projections.

Berger offers school administrators and architects a complete planning and installation service, too. A service which supplies technical planning and engineering assistance, then assumes full responsibility for proper installation. Berger service is complete . . . right down to the tightening of the final bolt.

Look to Berger—world's leader in lockers—for (1) exclusive Key-Control; (2) the largest selection of standard steel lockers; (3) service which helps you provide the most efficient school storage system. Write:

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1054 Belden Avenue, Canton 5, Ohio
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Export Department: Chrysler Bldg., New York 17, N. Y.

REPUBLIC STEEL

Berger
STEEL LOCKERS

who has been with the New York State Planning Commission and the Institute of Field Studies at Teachers College, Columbia University, for the last four years, will serve as specialist in school building construction.

OTHERS . . .

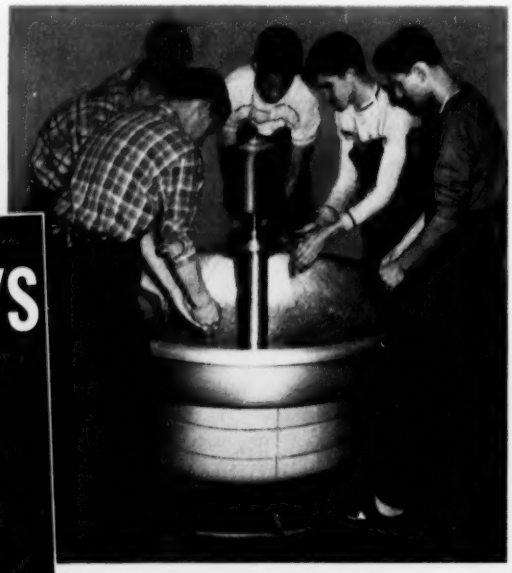
Walter M. Arnold, Oklahoma state supervisor of trade and industrial education at Oklahoma A&M, has been appointed director of vocational education for Kansas.

Seymour G. Winans, former dean of instruction, Glassboro State Teachers College, Glassboro, N.J., has been appointed assistant coordinator of the New Jersey Cooperative Program in Educational Administration. Mr. Winans has been superintendent for the Manalapan and Middletown township schools in New Jersey.

Frank Thomas, superintendent at Valley Falls, Kan., since 1945, has been appointed assistant to the U.S. Commissioner of Education.

Installation in New Brunswick (N. J.) Vocational School.

No water wasted. Boys can't leave with the water supply "on."



BRADLEYS ARE IDEAL

for Vocational Schools, too!

● Placed right in the workrooms, laboratories as well as in the general washrooms, Bradley economical Washfountains provide safe, handy washing facilities in least amount of space.

Up to 10 are accommodated simultaneously at a 54-inch Bradley, with clean running water from the *one* central sprayhead. With foot-control, there is no chance of spreading disease since hands make no contacts except with the water. The bowl is self-flushing and collects no contaminating water.

Bradleys can be installed in present buildings or new ones with minimum amount of piping connections. They are made in 2-person models for small washrooms, and larger 6-10 person models.

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BRADLEY washfountains

Distributed Through Plumbing Wholesalers

Illustrated Catalog 5204 mailed free on request.



Homer Allen, professor of physical education at Purdue University, Lafayette, Ind., has taken a year's leave of absence to become director of driver education for the state of Indiana.

Rachael Wingfield DeAngelo, executive secretary of the American Association of School Librarians, has resigned to become children's editor for a New York publishing house.

Rodney Tillman, assistant professor of education at the University of Arkansas, will assume his new duties as associate secretary of the Association for Supervision and Curriculum Development June 1. Mr. Tillman will assist state and regional A.S.C.D. associations in planning their annual programs of activities. Before joining the University of Arkansas faculty, he was a high school teacher at Hughes, Ark., and principal of the Sam Taylor Elementary School, Pine Bluff, Ark.

A. Lachlan Reed, headmaster of Northrop Collegiate School, Minneapolis, has joined the staff of the U.S. Office of Education. Dr. Reed will become special assistant to the commissioner of education, **S. M. Brownell.**

DEATHS . . .

John A. Buckles, superintendent at Oskaloosa, Kan., at the age of 50.

Fred T. Moore, former superintendent at Alameda, Calif.

James Yadking Joyner, former state superintendent of North Carolina, at the age of 91.

George H. Neilsen, superintendent at New Raymer, Colo.

Aaron Merritt Jones, superintendent for Suffolk County, New York, from 1933 to 1950.

Francis H. Wing, former associate superintendent at Buffalo, N.Y.

Audra W. Hadley, superintendent for Oswego County, New York, since 1931.

Louise Stondahl, superintendent for Ottertail County, Minnesota.

Earle R. Seidner, superintendent at Middleton, Ohio.

Clayton Schmidt, superintendent at Peever, S.D., since 1941, at the age of 63.

George F. Piggot Jr., associate superintendent in charge of the division of housing, New York City, since 1948, at the age of 60.

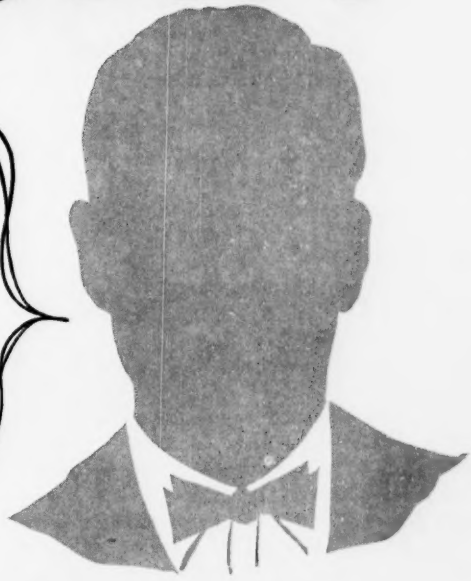
Fred W. Frostic, former superintendent at Wyandotte, Mich., and former president of the Michigan Conference of City Superintendents.

"it's the best!"

SAYS

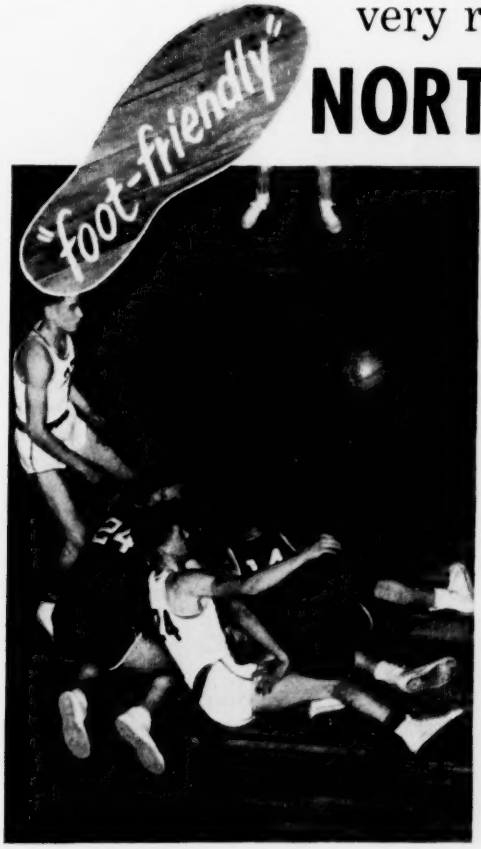
Prominent College Coach

This coach's emphatic statement, "It's the best!" came in response to our question: Why is Maple your choice for a playing floor? *ALL* Coaches queried answered, "Maple," for any basketball floor.



Shin-splints or other types of leg troubles very rare, with gymnasium floors of—

NORTHERN HARD MAPLE



The plain words above accurately sum up the answers of 200 basketball coaches. (We asked their opinion about Maple flooring in gymnasium and multi-purpose rooms.)

the finest floor that grows

We believe every schoolman and school architect will agree that this is as valid a judgment as could well be obtained. Good coaches have every reason for wanting players' injuries kept at a minimum while confidence and skill are given every chance to develop. They prefer Maple for scores of reasons, such as:

Maple has "give" plus firmness—no "dead" spots—easier on feet and legs—better light reflection—aids peripheral vision by better contrast of court lines, uniformity, less confusion—affords better traction—is smoother, generally more sanitary and less productive of floor-burns.

Specify **MFMA** Northern Hard Maple with the confidence it deserves. See Sweet's—Architects' 12k-MA or write for AIA file textbook folder and Floor Finishes folder.

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FLOOR WITH NORTHERN HARD MAPLE
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THE BOOKSHELF

Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

School Boards and Superintendents. Revised edition. By Ward G. Reeder, professor of education, Ohio State University. Written for school board members, this book contains 276 questions and answers found to be most frequently asked by new members of school boards concerning business and financial matters of the schools. Stresses the kind of working relations that should exist between the school superintendent and the school board. The Macmillan Co., 60 Fifth Ave., New York 11. Pp. 250. $3.50.

Elementary-School Organization and Administration. By Henry J. Otto, graduate professor of elementary administration and curriculum, University of Texas. Third revised edition, using the "trends of the Forties" in educational thought and practice to give a new point of view to organization and administration of elementary schools. Appleton-Century Crofts, Inc., 35 W. 32d St., New York 1. Pp. 714.

School Men at Work in Their Communities. By Harry E. Moore and Vernon L. Armstrong. A description of action programs for community improvement in nine Texas school districts. Case study approach used to analyze rôle of the school administrator in bringing about community improvement. Southwestern Cooperative Program in Educational Administration. University of Texas, Austin. Pp. 19.

C.P.E.A. Three years of progress in the Cooperative Program in Educational Administration. The accomplishments of the C.P.E.A. during its first three years are presented in summary form in this report. It is a brief description of the job now in progress, not a conclusive report or an evaluation of what has been done. Published by the American Association of School Administrators, 1201 16th St., N.W., Washington 6, D.C. Pp. 32. 50 cents.

Personnel Problems of School Administrators. By Clarence A. Weber, professor of education, University of Connecticut. Discusses problems of personnel administration in schools and suggests new approaches to these problems in an effort to improve conditions. The text includes the most recent research in the fields of substitute teacher service, salaries and salary scheduling, orientation of new teachers, educating teachers in service, and teacher organization. McGraw-Hill Book Co., Inc., 330 W. 42d St., New York. Pp. 364. $5.

A Manual for Determining the Operating Capacity of Secondary-School Buildings. By Marion J. Conrad. Includes chapters on the capacity formula, an example of a capacity study and detailed instructions for completing the five forms that accompany the manual. Bureau of Educational Research, Ohio State University, Columbus 10. Pp. 28. $1. Extra forms 25 cents per set.

SAFETY EDUCATION

Teacher's Triptik. Prepared by Luverne Crabtree Walker, elementary school supervisor for the District of Columbia. A guide for elementary and junior high school teachers in planning a full year's traffic safety educational program. Contains specific suggestions for presenting each phase of the year's program to the pupils. Traffic Engineering and Safety Department, American Automobile Association, Washington, D.C. Pp. 28. 25 cents.

SCHOOL LAW

Handbook of School Law. By Lee O. Garber, associate professor of education, University of Pennsylvania. Designed to be used in all 48 states, this handbook is concerned largely with legal principles gleaned from court decisions. Some decisions are concerned with the interpretation of statutory laws, which differ in different states; others are concerned with questions not covered by statute. Special chapters deal with such topics as liability, administrative procedures, and school property, and with cases concerning pupils and teachers. Arthur C. Croft Publication. New London, Conn. Pp. 158.

OF GENERAL INTEREST

Commission on Foreign Economic Policy. Report to the President and the Congress, January 1954. U.S. Government Printing Office, Washington 25, D.C. Pp. 94. 35 cents.

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• Compare this Lyon Locker with any other. Compare its modern styling—its sturdy construction. There's no better way to prove that feature-for-feature and dollar-for-dollar, Lyon is the most logical choice for your school installations.

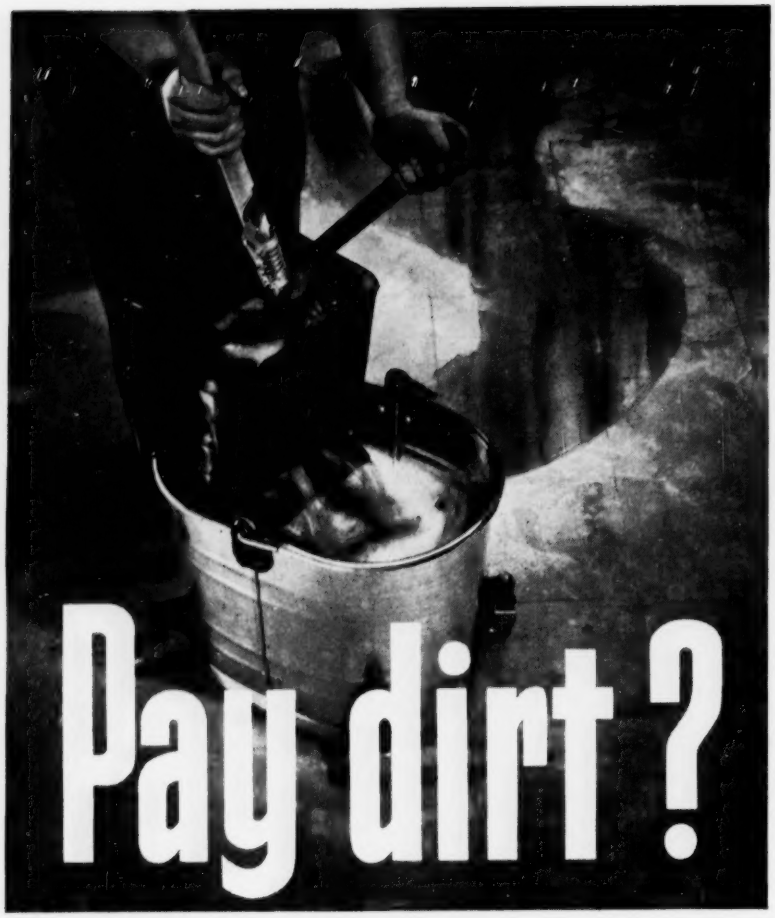
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Recessed Handles for Appearance and Safety
All Lyon Lockers feature an exclusively designed *recessed handle* . . . smart in appearance and completely eliminating sharp, protruding parts. It may be used with either padlock, built-in key or combination lock. A really outstanding Lyon feature—and it's only one of many!

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A PARTIAL LIST OF LYON STANDARD PRODUCTS

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• Stools	• Storage Cabinets	• Tool Boxes	• Toolroom Equipment	• Revolving Bins	• Work Benches	• Drawer Units	• Tool Trays
• Bin Units	• Drawing Tables	• Parts Cases	• Wood Working Benches	• Hanging Cabinets	• Bench Drawers	• Hopper Bins	• Shop Desks



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Expensive? You bet! In annual cleaning costs, 95¢ of every cleaning dollar goes for man-hours—only 5¢ for materials. So, the longer a job takes the more you pay!

If you want to make money on cleaning costs, your jobs must be done faster. And that's just what Holcomb products are made to do!

Ask your Holcombman to demonstrate how fast "*Floats-Off*" gets rid of dirt and grease. You simply mop it on, and rinse it off—your floors come shining clean. Next, have him apply *Holcomb Water-Proof Wax*. It stays on longer, gives your floors greater protection because water won't affect it! *Water-Proof Wax* withstands dozens of wet-moppings and still gives you a beautiful floor! Then, watch *Holcomb Maintenance Tools*, designed and tested for speed, clear your floor of abrasives, dust and dirt in record time.

Your Holcombman will show you in minutes how to save cleaning hours—and at a profit to you! *Research Laboratory and Factory: 1601 Barth Avenue, Indianapolis, Indiana. Branches: New York and Los Angeles.*



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Scientific cleaning materials

COMING EVENTS

JUNE

21-24. National Association of Student Councils of the N.E.A., St. Paul.

23-26. Ninth annual conference of National Commission on Teacher Education and Professional Standards of the National Education Association, Albany, N.Y.

27-July 1. National School Public Relations Association, N.E.A., 19th annual meeting, New York City.

27-July 2. National Education Association, 92d annual meeting, New York City.

JULY

15, 16. Thirteenth annual Conference on Elementary Education, Northwestern University, Evanston, Ill.

23-25. National Association of Educational Secretaries, annual convention, Eugene, Ore.

AUGUST

1-4. National Audio-Visual Association, ninth annual convention and trade show, Chicago.

13, 14. International Institute on Child Psychiatry, University of Toronto, Toronto, Ont.

14-21. Fifth International Congress on Mental Health, University of Toronto, Toronto, Ont.

22-28. National Conference of Professors of Educational Administration, University of Denver.

OCTOBER

1, 2. Conference of County and Rural Area Superintendents, Washington, D.C.

4-6. National Conference on Rural Education, Washington, D.C.

10-15. Association of School Business Officials of the United States and Canada, Los Angeles.

14, 15. American Council on Education, annual meeting, Chicago.

18-22. Forty-second National Safety Congress and Exposition, Chicago.

NOVEMBER

7, 8. Association of Urban Universities, annual meeting, Pittsburgh.

7-13. American Education Week.

16-20. American School Food Service Association, Miami Beach, Fla.

FEBRUARY

24-26. National School Boards Association, St. Louis.

26-March 2. Regional convention, American Association of School Administrators, St. Louis.

MARCH

12-16. Regional convention, American Association of School Administrators, Denver.

16-19. Department of Elementary School Principals, Chicago.

APRIL

2-6. Regional convention, American Association of School Administrators, Cleveland.

Sanistand urinals by American-Standard provide cleaner, more sanitary girls' washrooms in the new Canton Senior High School

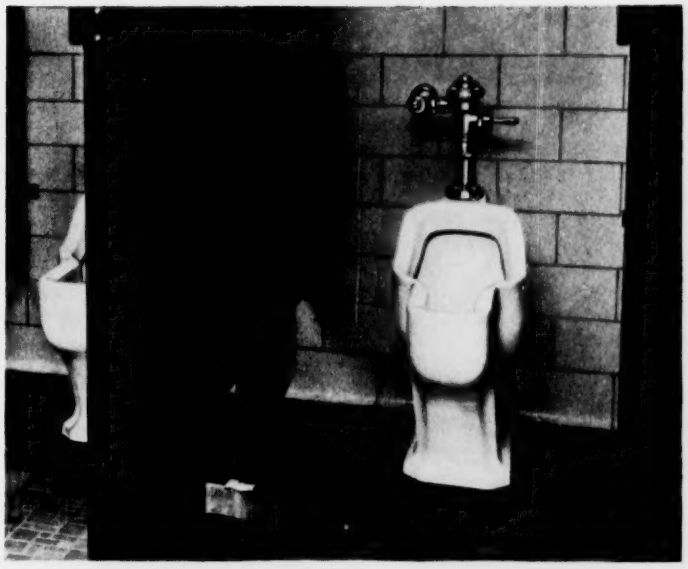


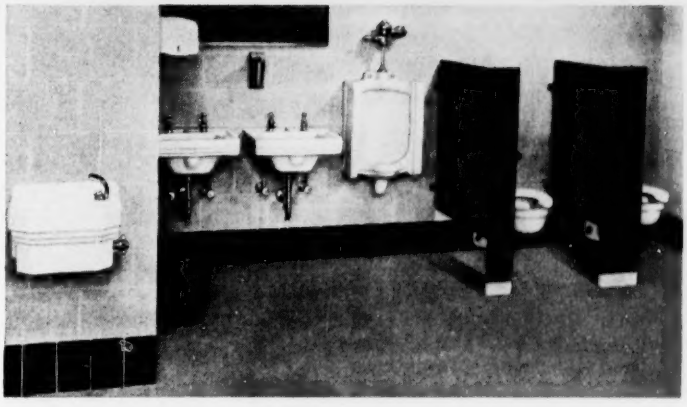
Included in the variety of American-Standard plumbing fixtures selected by architects Atkins, Barrow and Associates for the new Canton Senior High School, Canton, Illinois, were Sanistand fixtures—the urinals for women.

The Sanistand fixture, one of the most important contributions to washroom sanitation, is ideal for installation when large groups of girls must use the same washroom during the short periods of time between classes. Washrooms with Sanistand urinals can often handle twice the number of girls with less confusion.

Sanistand urinals cut down maintenance time, too. The large bowl, extended lip, slanted rim and convenient 18-inch height tend to discourage misuse, keep fixtures cleaner, floors neater, reduce upkeep. The Sanistand fixture is made of genuine vitreous china and is available with foot or hand operated flush valve. It features siphon vortex water action with flushing rim which empties bowl quickly and quietly, rinses inside of fixture. The Sanistand fixture is designed primarily as a urinal and should be installed in conjunction with conventional toilets, but it can function as a toilet.

For more information on the Sanistand fixture and other American-Standard plumbing products, contact your architect or plumbing contractor. Or for descriptive literature write to: **American Radiator & Standard Sanitary Corp.**, Dept. NS-64, Pittsburgh 30, Pa.





In the boys' locker room of Canton Senior High School, a variety of American-Standard plumbing fixtures is used. They are the Neo Toric drinking fountain, New Buena lavatories, Casal urinal, and Glenco toilets. These wall-type fixtures make floor cleaning faster and easier.

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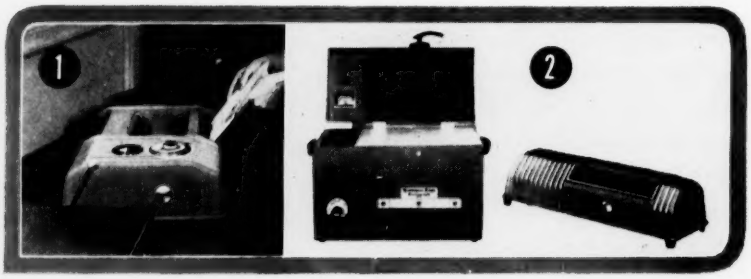


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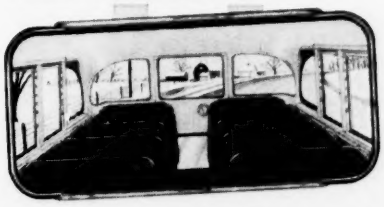
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What's New FOR SCHOOLS

JUNE 1954 Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 184. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Vision and Safety Featured in Wayne Bus



"Panoramic Driver Vision" is a special feature of the new 1954 Wayne School Bus Body. The "Curv-a-Corner" rear windows provide an enlarged clear-view area, eliminating "blind spots" and giving greater driver visibility. The "Air-Wedge" Emergency Kick-out Windshield has no center post and is so constructed that it can be pushed out in an emergency, even by a child. Because of the wedge formed by the two slanting windshield panels, it cannot be pushed in, no matter how hard the wind pushes against it. A new patented "snorkel defroster" for clearing the window to the left of the driver, or supplementing the separate windshield defroster, is another feature of the new Wayne.

Every window in the bus can be used as an emergency exit, with an unobstructed opening of more than 13 inches. Interior walls are of marproof aluminum, to eliminate scribbling and otherwise defacing the finish, also reducing maintenance. A new lockbolt fastening device is used at all structural joints in the new body. The design is such that the lockbolt cannot come loose once it is fastened. Every metal part is bonderized against rust and corrosion before final body assembly. **The Wayne Works, Richmond, Ind.**

For more details circle #475 on mailing card.

Garfield Luminaire for Low Ceilings

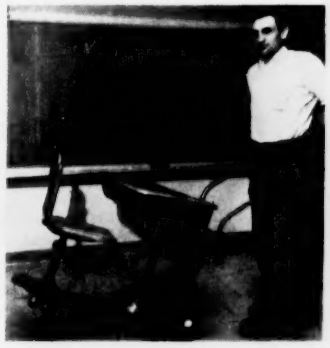
The long, low lines of the Garfield luminaire make it particularly well adapted for use where low ceilings necessitate a shallow illuminating source. The new series is available in 2-lamp, 4 and 8 foot fluorescent luminaires. The unit has an overall depth of only 3⅞ inches with a width of 12½ inches for the 2-lamp luminaire. The Garfield may be ceiling mounted or suspended from hangers. Both sizes may be individually mounted or mounted end-to-end to form a continuous row.

The Garfield is built around a rigidly constructed chassis. Side panels of diffusing polystyrene and a bottom louver with 35 by 35 degree shielding give comfortable brightness. The permanently attached top-closure type reflector assures high efficiency and ease of maintenance. The units are wired completely, ready to install. **Pittsburgh Reflector Co., 482 Oliver Bldg., Pittsburgh 22, Pa.**

For more details circle #476 on mailing card.

Desk Moving Device Saves Effort and Wear

A new device has been developed to facilitate the moving of seating units in schools. Known as the Scoot-A-Desk, the unit has an easy cam lever adjustment



that fits desks of all makes and moves them with ease and smoothness. It is of all spot-welded steel construction with ball-bearing wheels and semi-pneumatic rubber tires. The fork and lower bumper are rubber covered to prevent marring of desks and the Scoot-A-Desk is constructed to stand up under constant use. It permits quick and easy moving of desks and seating units for cleaning, for re-arrangement of rooms and for transfer to other rooms or areas. **Spartan School Equipment Co., Hinchman Rd., Baroda, Mich.**

For more details circle #477 on mailing card.

Time System Is Self-Regulating

The new IBM 12-hour Self-Regulating Electronic Time System is designed to provide compensation for prolonged power interruptions due to storms, repairs and other unavoidable circumstances. All indicating clocks in the system that have fallen behind more than one hour are corrected twice each day. Time lags of 59 minutes or less, or fast errors of up to 55 seconds are supervised hourly and corrected in one minute as in other IBM time systems.

In the new system any desired hour may be selected for the 12-hour correction cycle and all clocks in the system are corrected automatically at that time. The new system requires no special clock and signal wiring, making installation costs nominal. Existing installations of IBM Self-Regulating Electronic or Synchronous-Wired Systems can be expanded to full 12-hour correction. **International Business Machines Corp., 590 Madison Ave., New York 22.**

For more details circle #478 on mailing card.

Table and Bench Set Easily Folded

The new Two-Fol Folding Table and Bench Set is a mobile unit, without wall cabinet, which rolls easily on four casters to any desired area for use or storage. The new unit provides seating for 20 children or 16 adults on two 12 foot benches attached to the table. It is designed for quick and simple conversion of rooms for various purposes and is easily folded and rolled out of the room for outside storage if desired. The extended table-bench unit may be quickly separated at the center to form two independent sets, each six feet long, if desired.

The Two-Fol is of all-metal construction with top surfaces of gray linen plastic. It is ruggedly constructed, strong and durable, and the tubular steel legs



and braces are cadmium plated. The strong, light weight unit is easily handled. **Rol-Fol Table, Inc., 8467 Melrose Place, Los Angeles 46, Calif.**

For more details circle #479 on mailing card.

(Continued on page 156)

What's New ...



Safety and Comfort in Oneida Super School Bus

The Oneida 1954 model conventional school bus has been designed to incorporate every safety feature. The doubly-riveted body panels forming the "cradle of steel from wheel to wheel" are supplemented by full coverage, eight-inch rear bumpers and massive rub rails for added traffic protection. Ceiling height has been increased in the new model to six feet for full visibility, better air circulation and greater comfort. The newly designed heavy-duty heater assures circulation of fan-supplied air to every corner of the bus.

The new two-piece safety sash is built right to the roof line for better visibility. It is constructed of safety glass, rimmed in steel and set in rubber. The lower panel is stationary to prevent heads and arms being put outside the bus, and the top sash is full nine inches for safety and ventilation. The new type grab rail extends down to the bottom step for safe and quick loading of small children. Operation of lights and emergency signals by finger-tip control lets the driver keep his eyes on the road. There is a new type marbleized floor covering which, with the wall-mounted seats, makes floor cleaning easier. **Oneida Products Corporation, Canastota, N.Y.**

For more details circle #480 on mailing card.

Self-Shielded Mechanism in Miniature Instruments

Designed for use in laboratories and in educational work, the new line of Miniature Portable D-C Instruments incorporates a self-shielded mechanism. They employ the Weston Core Magnet which provides effective shielding, permitting close proximity to magnetic materials without affecting their accuracy. Known as Model 281, the miniature portable instruments are furnished in complete bakelite cases, in a wide variety of ranges. **Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N.J.**

For more details circle #481 on mailing card.

Fiberglas Reenforcement in Easy-Tite Faucet Washer

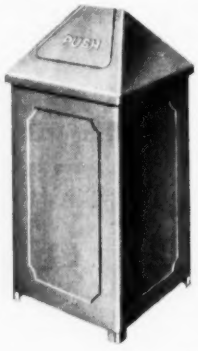
Two improvements have been made in the Easy-Tite Faucet Washer as a result of years of tests and research. Fiberglas, which is unaffected by varying temperatures, has no stretch and high tensile strength, is used in the washers for long wear and resilience. A special compound developed by du Pont which has high resistance to extreme hot water and is impervious to all water impurities is also used in the improved Easy-Tite washers. **J. A. Sexauer Mfg. Co., Inc., 2803 Third Ave., New York 55.**

For more details circle #482 on mailing card.

Waste Receptacle Has Streamlined Design

Modern streamlining has been applied to the Solar-Sturges self-closing waste receptacle line. These efficient units for sanitation and neatness have been redesigned for more attractive appearance. The swinging top still opens instantly, at a touch, to allow waste to be easily deposited, and swings closed gently and silently. They are easy to empty as the top is merely tilted back, permitting easy removal of the inner container for emptying. There is only one moving part, in the swinging top, thus minimizing maintenance.

The new Solar waste receptacles have no sharp corners and can be used to



encourage neatness in corridors, toilet rooms and washrooms, lockerrooms, cafeterias, laboratories, study halls and other areas in the school. They are available in a number of sizes to fit every need. **Solar-Sturges Mfg. Div., Pressed Steel Car Co., Inc., Melrose Park, Ill.**

For more details circle #483 on mailing card.

Power Tool Bench Is Adjustable

A new line of Morrison Power Tool Benches has recently been introduced. There are two sizes of the two-way adjustable benches which are designed to meet all requirements for shop installations. Model 2443 has height adjustment from 24 to 33¼ inches and length adjustment from 23⅞ to 42½ inches. Model 1424 has the same height adjustment with length adjustment from 14⅜ to 24 inches. The two benches provide the complete range of sizes required for mounting the standard line of small power tools required for a shop. **Morrison Products, Inc., 168th and Waterloo Rd., Cleveland 10, Ohio.**

For more details circle #484 on mailing card.

(Continued on page 158)

Weed Killer Is Safe and Effective

Dolge N P Weed Killer is a new type product which kills on contact. It comes as a readily soluble powder requiring no agitation to keep it in suspension. The product is non-selective, for use where no growth is wanted. It kills on contact and also acts by translocation to finish roots. Heavy doses sterilize soil so seeds cannot sprout. Sprayed, sprinkled or used as a dry powder, N P Weed Killer is non-inflamable, non-volatile, non-corrosive and quick acting. **The C. B. Dolge Company, Westport, Conn.**

For more details circle #485 on mailing card.

Steel Chalkboards in Long Lengths

Amscad Steel Chalkboards are available in lengths up to fifty feet, permitting a clear length of chalkboard along an entire wall. The extra hard mineral artificial slate writing surface gives high quality writing and erasing. The chalkboards, forty-two inches high, are anchored to the wall by plastic cement and moldings. They are available in the popular blue-green but are offered also many other attractive colors. **Swarr Manufacturing Co., 837 W. Walnut St., Lancaster, Pa.**

For more details circle #486 on mailing card.

Permanent Grandstand Serves Dual Purpose

Several advantages are mentioned in the description of the new Playtime Galvanized Welded Permanent Stand. The one piece welded panel units are hot-dip galvanized after fabrication for protection from rust. Maintenance cost is reduced as the stands are easy to clean and maintain. The unitized assembly permits flexible application, making it possible to begin modestly and add seating as the budget permits. All steel used in the stand is a minimum of ¼ inch thick and all boards are selected West Coast Douglas Fir.

A second use for the stands is offered by the "Open-Bay" construction which provides maximum usable space beneath. The understructure is available at no extra cost on stands of 25 rows and is



sufficiently large to serve as garage space for school buses. The space may also be used for dressing rooms, lavatories, storage or other purposes. **Playtime Equipment Corp., Mars, Pa.**

For more details circle #487 on mailing card.



Tornado Twins used in Holy Trinity High School, Westfield, N. J.

The TORNADO TWINS Say:

There's NO Cleaning Like TORNADO® Cleaning

You'll never know what fast, easy and efficient cleaning is until you try the "Tornado Way."

The Tornado Floor Machine goes to work with its "easy-to-operate" action, scrubbing, stripping wax, burnishing or polishing on all types of floors.

Right behind it comes the Tornado School Cleaner, picking up all suds, dirt or dust at air speeds up to 320 m.p.h.

School after school tells us that these Tornado Twins clean more square feet of floor faster, easier and more thoroughly than ever before.

Write for Bulletin 607 — We'll be glad to demonstrate in your school — no obligation.



Cleaning radiators is just one of the hundreds of uses of Tornado with its versatile attachments.



Removable motor unit becomes a shoulder-type Vac, here cleaning air conditioning equipment.

BREUER ELECTRIC MFG. CO.

5098 North Ravenswood Avenue • Chicago 40 Illinois

What's New . . .

Flat Wall Paint Is Washable and Odorless

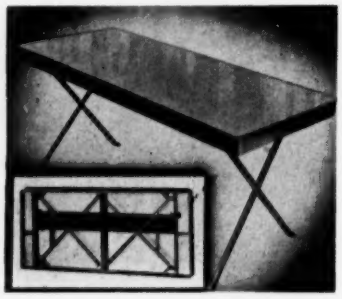
An alkyd-type flat wall paint that is mar resistant, washable and durable has been announced. It is easily applied by either brush or roller coater and dries rapidly with no paint odor. The paint, known as Wallhide PBX Flat Wall Paint, is offered in a modern color range, all of which leave a finish that can be washed or scrubbed repeatedly without marring it or fading its color. Finger prints, crayon smears and dirt are easily washed away, leaving a smooth appearance. **Pittsburgh Plate Glass Co., 632 Fort Duquesne Blvd., Pittsburgh 22, Pa.**

For more details circle #488 on mailing card.

All-Steel Design In Tracy Folding Table

All-Steel Uni-Structure design is employed in the new Tracy Folding Table. The table is easy to set up and fold and the top supporting brace-beam folds down to form a positive pedestal lock to give a rigid, stable unit. The table is light in weight, has smooth, all-steel edges, and the one piece steel frame includes the apron and edge. It is cross braced at three points for extra strength and stability.

The table is available in a wide selection of colors in Formica Masonite to meet the trend toward psychological color selection in educational, medical and other institutions. The X-type pedestal permits wide base protection against tipping and the design is modern in appearance and construction. Tables are



available in 6 and 8 foot lengths, 30 inches wide, and in 29 or 24 inch heights. **The Tracy Co., Cedarburg, Wis.**

For more details circle #489 on mailing card.

Iodine Disinfectant for Shower and Bath Rooms

Iodine is combined with a compatible synthetic detergent to form Showersan, a new disinfectant designed to prevent the spread of Athlete's Foot in shower rooms and gymnasiums, on walls, floors and fixtures. The special formula renders the iodine non-irritating and non-staining, while keeping its effectiveness. Its detergent action renders Showersan an effective cleanser that penetrates cracks and crevices to clean and sanitize in one operation. **West Disinfecting Co., 42-16 West St., Long Island City 1, N.Y.**

For more details circle #490 on mailing card.

Steel Chalkboard Has Fine Writing Surface

The durable surface of Austral-Steel Chalkboards is vitreous porcelain fired on 18 gauge enameling steel. It resists chipping, scratching, denting and abrasion and is offered with a long-time guarantee by the manufacturer. The excellent writing surface takes a fine chalk mark and erases easily. The pleasing green color blends with modern classroom decorations.

Magnets can be used on the porcelain-steel surface of the new chalkboards, permitting the board to serve for bulletins and as an aid in visual instruction. The board is available with various types of backing, such as a waterproofed, sound-deadening felt backing and a fiber board backing with a waterproof coating on the reverse side. The board can be washed freely, does not warp, break or shatter and is extremely durable. **Austral Products Corporation, 225 Broadway, New York 7.**

For more details circle #491 on mailing card.

(Continued on page 160)

NACO

PLUG IN 'N SERVE PORTABLE CART



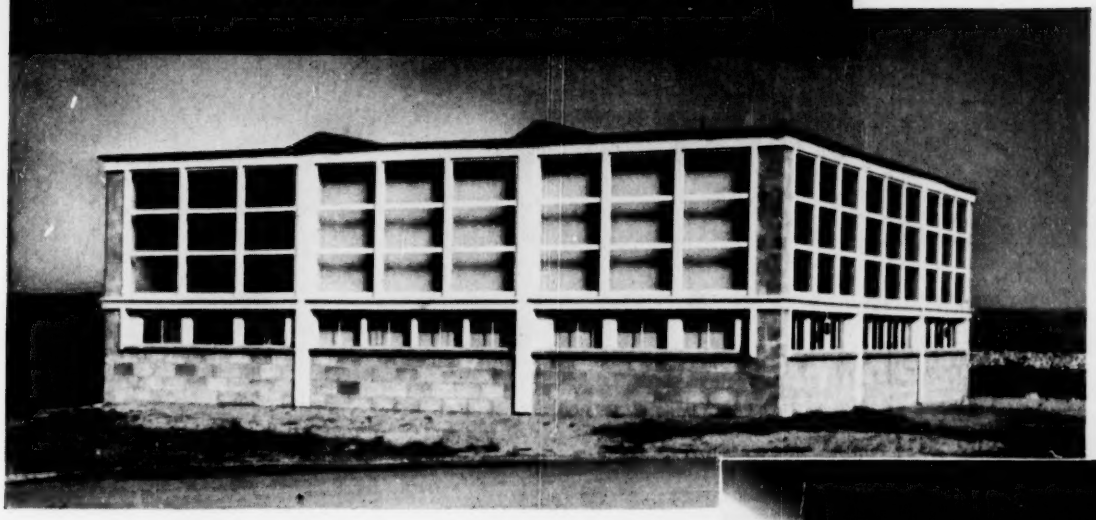


Serves 200-300 students Modern Style

Save money! Forget the school kitchens and cafeterias—the big budget-users of the past. Now one central school kitchen prepares meals for all the others at *much* lower cost . . . sends meals by truck in the NACO Portable **Food Cart. Just plug NACO in, in the gymnasium or auditorium . . .** Serve and save! About 200-300 Oven-Hot meals are kept in three, insulated "hot compartments." Salads and other "cool foods" may be refrigerated with ice, dry ice, or kept at room temperature. Holds 18 serving pans or 18 fireless cooker pans in hot section and 6 pans in cool section. Designed to fit into a serving line. For complete data on annual savings with NACO, write.

ATLAS DIVISION
NATIONAL CORNICE WORKS
1323 Channing Street
Los Angeles 21, California

GLASS goes to CLASS at MISSISSIPPI



Research Finds Better Ways To Remove Harmful Qualities of "Raw" Sunlight

In a specially designed experimental building on its factory grounds, Mississippi, world's largest manufacturer of rolled, figured and wired glass, literally sends its products to class. Various patterns and surface finishes are subjected to school exams in a continuing research on daylighting in the modern school.

Lighting engineers have found that the glare of "raw" sunlight is distracting and harmful in the schoolroom. Uniform, natural, glare-free illumination not only helps protect precious young eyes from dangerous fatigue; it also helps maintain class interest and aids concentration.

As a result of their extensive studies and experience in the important field of schoolroom lighting, Mississippi technicians are prepared to assist you in your glazing problems. They recommend these outstanding Mississippi patterns for their schoolroom lighting qualities:

COOLITE, Heat Absorbing and Glare Reducing Glass—because it not only provides glare-free, natural illumination, but also absorbs nearly 50 per cent of solar heat. Makes seeing tasks easier . . . keeps interiors cooler.

PENTECOR—a handsome, ribbed pattern that affords maximum light distribution. Throws softened, diffused light deep into interiors.

HYLITE—with an attractive surface finish that gives maximum light plus diffusion.

POLISHED MISCO WIRE GLASS—for maximum beauty and protection. An approved fire retardant (No. 32).

Translucent, light diffusing figured and wired glass by Mississippi is available in a wide variety of patterns and surface finishes. All are "visioneered" to distribute light to best advantage. When you build or remodel your school, specify glass by Mississippi.



Smoke box photo—window glazed with clear glass. Note light loss due to reflection.



Compare above with this smoke box photo in which window has been glazed with a diffusing glass.



Opening glazed with diffusing glass with more directional light distribution.

MISSISSIPPI *Glass* COMPANY

88 ANGELICA ST. SAINT LOUIS 7, MO.

NEW YORK • CHICAGO • FULLERTON, CALIF.

Write today for free literature. Samples on request.



WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

What's New . . .

Improved Electric Broiler in Five Combinations

The new improved Hotpoint electric broiler is said to offer fast four section Calrod broiling units, fast pre-heating performance, high production capacity and a pistol grip which remains cool to the touch. Power of the new units has been stepped-up to lower the preheating period considerably. Heat can be measured as an exact ingredient in the precision machine, holding selected temperatures for year after year of heavy-duty use, ensuring uniform results for the long life of the device. The improved broiler is available in single or double broiler with oven or cabinet base, and single broiler without base. **Hotpoint Co., 227 S. Seeley Ave., Chicago 12.**

For more details circle #492 on mailing card.

Complete Height Range in No. 454 Uni-Desk

The new No. 454 Uni-Desk provides a complete height range for pupils in grades 1 through 12. It is adjustable three ways to fit all students, regardless of differences in size. The automatic self-leveling device prevents rocking and jiggling of the desk on uneven floors.

The one-piece desk top has GE Textolite surface for long hard use without marring. It is also available in hardwood plywood if desired. The top offers greater usable working area for increased comfort and efficiency. Rolled edges around the entire perimeter of the one-piece



steel bookbox provides smooth surfaces inside and out. Books, papers and tools are easily removed over the rolled edge. **Irwin Seating Company, Grand Rapids, Mich.**

For more details circle #493 on mailing card.

Lawn Sprinkler Is Self-Propelling

A new traveling lawn and garden sprinkler has been developed which is self-propelling and self-winding. Propelled by the water it sprinkles, the Reel Sprinkler automatically winds up the hose as it follows a straight path or moves around obstacles. It automatically waters an area up to 70 feet wide by 125 feet long.

The Reel Sprinkler is constructed of high grade metals, is simple to operate and shuts itself off when the designated area is sufficiently watered. It is scientifically engineered for years of service. **Reel Sprinkler Co., 1800 N. Westwood Ave., Toledo 7, Ohio.**

For more details circle #494 on mailing card.

Flat-Bed Printer Offered in Dri-Stat Equipment

So compact that it takes up less space than a typewriter, the new Dri-Stat flat-bed printer is capable of printing copies of bulky material such as pages from books, bound records or catalogs. A single movement closes the printer, turns on the light and exposes the paper. Uniform illumination over the entire printing surface is provided by the efficient lighting system and accurate exposure control gives clear, sharp copies. The printer is easy to operate and produces the desired copies in minimum time. **Peerless Photo Products, Inc., Shoreham, Long Island, N.Y.**

For more details circle #495 on mailing card.

(Continued on page 162)

It's the CLICK that counts



For quickest and easiest operation, plus economy, security and durability —it's the Gougler Keyless Lock. In the dark or in the light, just Count the Clicks —presto, it's open.

Available with or without Master Key

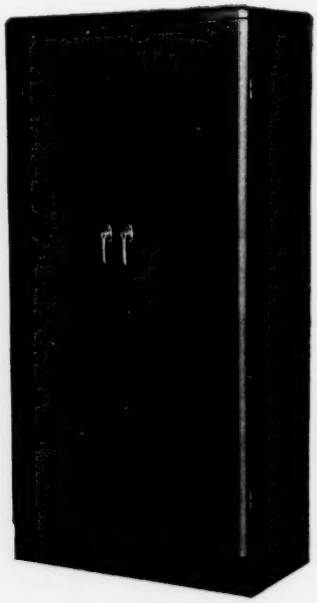
GOUGLER KEYLESS LOCKS

- Are Serially Numbered
- Have FREE Service Records
- Materials & Workmanship Guaranteed

WRITE FOR INFORMATION

C. L. GOUGLER Keyless Lock Co.

705-769 Lake St., Dept. 3, Kent, Ohio



This **STORAGE CABINET** WITH RADIUS CORNERS *is a real* **"BUY"**

Our No. 3678 Cabinet will answer your storage problems in every way. It is finished in baked-on olive green or office gray enamels, and has adjustable shelves. Spot welded assembly with lock in handle and insulated doors. Set up only. Shipped one per carton. Size 36" wide by 18" deep by 78" high; weight 175 pounds.

Price **$50.00** *each*

F. O. B. ST. LOUIS, MO.

MIDWEST METAL MANUFACTURING CO.
1818 N. 18th ST. - ST. LOUIS 6, MISSOURI

Selected for maximum wear with minimum care

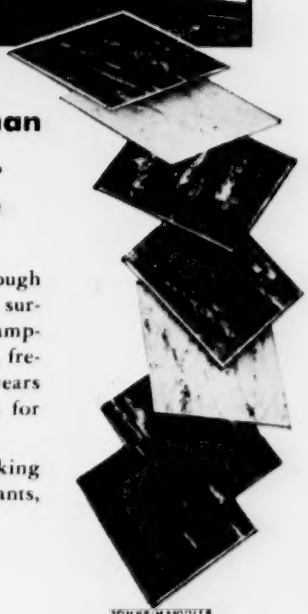


Johns-Manville TERRAFLEX Vinyl Floor Tile

. . . in Budd Company R.D.C. all-stainless steel passenger cars



Heavy traffic in this Budd Company R.D.C. diesel-powered passenger car has little effect on the durable J-M Terraflex floor. A damp-mopping whenever necessary, will restore it to its first-day color beauty.



J-M Terraflex® needs less care and gives more wear than any other type of resilient floor of equal thickness . . . pays for itself through years of low-cost maintenance

As a result of its tested performance in railroad car installations, Johns-Manville Terraflex Vinyl Floor Tile is standard equipment in the Budd Company's new R.D.C. passenger cars.

J-M Terraflex is a flooring of time-proved superiority. Made of vinyl and asbestos it is exceptionally tough and resistant to traffic . . . defies grease, oil, strong soaps and mild acids.

Terraflex saves time and dollars through low-cost maintenance. Its nonporous surface requires no hard scrubbing . . . damp-mopping keeps it clean and bright . . . frequent waxing is eliminated. Through years of economical service Terraflex pays for itself.

Available in a large range of striking colors, Terraflex is ideal for restaurants, public areas, schools, hospitals.

Specify J-M Terraflex whenever your plans call for resilient flooring. Its long-wearing beauty and long-time economy provide a maximum of reliable floor service. For complete information write Johns-Manville, Box 158, New York 16, N. Y.

JOHNS-MANVILLE JM PRODUCTS

Johns-Manville

What's New . . .

More Efficient Utilization of Light Weight Steel

A new method of handling light weight steel in construction has recently been announced. Pre-Stressed Jr. Channel Rigid Bents were developed in the construction of a new high school. Box-shaped steel girders were made by welding, to form the new Rigid Bents. Bents are field-connected by welding on the ground before erection. Pre-stressing facilitates erection and makes the system practical. Time of erection was reduced and there was considerable saving in cost, according to the manufacturer, in use of the new unit. The Junior Channel Rigid Bent provides an extremely strong framework with reduced weight, erection time and cost. **Jones & Laughlin Steel Corporation, Gateway Center, Pittsburgh 30, Pa.**

For more details circle #496 on mailing card.

Physical-Political Globe for Teaching and Reference

A new 24 inch Physical-Political Globe has been introduced for use in schools, libraries and offices. It is offered in a variety of stands for floor or table use. Lightness and strength are combined in the molded wood-fiber plastic ball on which the map is printed. The "free-ball" design permits the globe to be turned to any point or lifted from the base for demonstration. It is carefully colored to show land elevations and contains a



wealth of political and cultural data. **Denoyer-Geppert Company, 5235 Ravenswood Ave., Chicago 40.**

For more details circle #497 on mailing card.

Multiple Copies Made Without Carbon Inserts

A new paper has been developed which can be used to make multiple copies of forms without the need of carbon paper inserts. The process uses combinations of two different coatings on ordinary paper, depending on how many copies are required. The new paper eliminates smudging and speeds efficiency in handling multiple copy forms. Called NCR (No Carbon Required) Paper, the new product produces clean, sharp copies when used with typewriter or pencil. **The National Cash Register Co., Dayton 9, Ohio.**

For more details circle #498 on mailing card.

Large and Small Intercom Systems

Two new intercom systems have recently been introduced by Masco. The Masco "Small Talk" is an inexpensive two-station system designed for low cost installation and operation. The unit gives two-way intercommunication up to 40 feet apart and calls can be originated from either unit.

The second new intercom system in the Masco line is the Deluxe 12 and 24 Station President Series offering flexible and versatile systems for institutional and business installations. One basic system can be adapted to every type of intercommunication set-up desired. A single Master can be used with up to 24 remote stations or an executive of up 25 masters may be used in a completely private intercom system. The President Series leaves switchboards free for outside calls and provides instant communication anywhere in the system. **Mark Simpson Mfg. Co., Inc., 32-28 49th St., Long Island City 3, N.Y.**

For more details circle #499 on mailing card.

(Continued on page 164)



and Every Year

This Year Cut Your Floor Maintenance Costs —use AMERICAN Machines, Supplies!

A maintenance machine is a "good buy" only when it can save you time, labor and money in actual performance and the company behind the product can offer you real maintenance service. It's a mistake to buy on low bid alone. Compare the ability of the machine to solve the problem economically, efficiently . . . ease with which it can be operated . . . produce the desired results. You'll see why American DeLuxe is preferred by many of the largest industries who find it the *finest all-purpose heavy-duty floor maintenance machine* on the market.

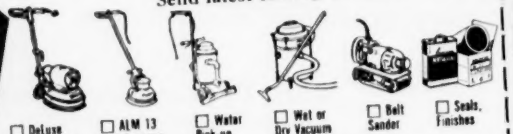
FREE Consultation on your Floor Problems

Your nearby American distributor will gladly call and show you the American way to save money on floor maintenance—without obligation. He also offers instruction for operators to help you obtain maximum benefits with American machines.

SCRUB
POLISH
STEEL WOOL
DISC SAND
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SEND Today!

The American Floor Surfacing Machine Co.
548 So. St. Clair St., Toledo 3, Ohio
Send latest catalog on the following:



☐ DeLuxe Maintenance ☐ ALM 13 Maintenance ☐ Water Pick-up ☐ Wet or Dry Vacuum ☐ Belt Sander ☐ Seals, Finishes

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AMERICAN Performance Proved Machines — NATION-WIDE SERVICE

Herrick's Rugged Durability Assures

GREATER DOLLAR VALUE



Model RSS88 Reach-in

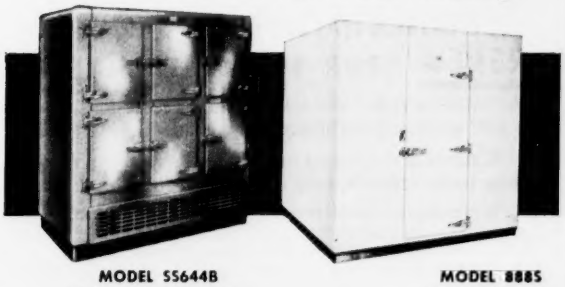
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* STAINLESS STEEL REFRIGERATORS

Years of trouble-free service are built into every HERRICK Refrigerator. Sturdy, slam-shut door latches withstand hardest usage. Ball-bearing hinges last indefinitely. An over-size Filterpure cooling coil chills to proper temperature . . . humidifies . . . provides fast recovery when doors are opened. Complete food conditioning assures peak freshness and flavor always. For proved performance, maximum convenience and top efficiency, HERRICK Stainless Steel Refrigerators are unmatched. Write today for the name of your nearest HERRICK supplier.

* Also available with white enamel finish.

Two Other Herricks That Will Give You More for Your Money



MODEL SS644B
Stainless Steel Reach-In

MODEL 888S
Walk-In Cooler

HERRICK REFRIGERATOR CO., WATERLOO, IOWA
DEPT. N., COMMERCIAL REFRIGERATION DIVISION

HERRICK *The Aristocrat of Refrigerators*



UNEQUALED in APPEARANCE, DURABILITY and STRENGTH

Mitchell FOLD-O-LEG *tables*

Convert any room into a Banquet or Group Activity Room . . . Set up or clear in minutes QUICKLY FOLD or UNFOLD for Changing Room Uses



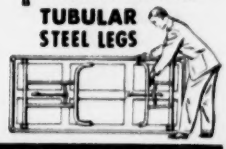
TOPS OF MASONITE PRESDWOOD, FIR & BIRCH PLYWOOD, LINOLEUM, RESILYTE PLASTICS



MAXIMUM SEATING

MINIMUM STORAGE

TUBULAR STEEL LEGS



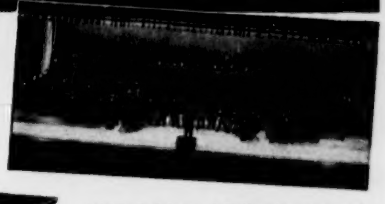
THE STRONGEST, HANDIEST FOLDING TABLE MADE!

Mitchell PORTABLE **FOLDING STANDS**

EASY TO SET-UP ON or OFF STAGE



RIGID, SAFE for BAND ORCHESTRA CHORAL & DRAMATIC GROUPS





LEGS FOLD UNDER FOR MINIMUM STORAGE

STACK IN SMALL SPACE

SAVE TIME & LABOR

IMPROVE APPEARANCE AND PERFORMANCE

Better Acoustics and Discipline. Easier control of group by Director. Available in 1, 2, 3 or 4 elevations. Easy to handle units with strong 4' x 8' Fir plywood tops and rigid tubular steel legs. Band stand shown stores in a space only 4' x 8' x 6' high.

Write for Descriptive Folders

MITCHELL MFG. COMPANY

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MANUFACTURERS OF
MITCHELL FOLDING TABLES, BAND AND CHORAL STANDS

What's New . . .

Type Cleaner Is Easy to Use

The new Star Type Cleaner is designed for quick and easy cleaning of typewriter type. It cleans fast and thoroughly without mess or stained hands, dissolving dirt and grime. The cleaner can be used on typewriter type, addressing machines, cylinders, feed rolls, time stamps and other office machines. It comes in an attractive plastic box. **Eberhard Faber, 37 Greenpoint Ave., Brooklyn 22, N.Y.**

For more details circle #500 on mailing card.

Mopping Tank Has Improved Construction

Several improvements in the White Mopping Tank have resulted in a com-



pletely streamlined model with long life. The chassis is all steel welded construction. The plate type, ball bearing wheels are cadmium plated and mounted under the center of the load for easier maneuverability and added strength. The self-cleaning water draw-offs are of solid bronze construction and do not drip or leak. The two compartments have a perforated plate in the bottom to catch the dirt. The truck is solidly constructed for long use and all parts are designed for efficient, easy operation. **White Mop Wringer Co., Fultonville, N.Y.**

For more details circle #501 on mailing card.

Free Standing Risers Have Sturdy Steel Base

No cross bracing is used for the free standing risers developed by Sico for choral groups, plays, bands, spectator seating and other uses. The units are engineered for complete safety with rugged steel structural members and 2 by 4 inch fir scuff pads to protect floors. They are available in two and three tier heights and each member is light enough to be easily handled by one man.

All platforms are equipped with toeboard to prevent chairs slipping off the back and guard rails are also available. The simple construction makes the risers easily portable and quickly erected or dismantled. **Sico Grandstands, Inc., 3565 Wooddale Ave., Minneapolis 16, Minn.**

For more details circle #502 on mailing card.

(Continued on page 166)

Conference Desk Developed for Teachers

The new Conference Teaching Desk is designed for classroom use. It has a 30 by 50 inch top with Formica facing for long wear, protection against damaging and ease of cleaning. The desk case has four drawers and there is a double center file drawer equipped with nylon rollers so that the drawer operates freely, regardless of weight of the contents.

Densified wood is used for the knee hole post of the desk to prevent splintering. The full conference feature permits students or other teachers or supervisors to sit comfortably at the rear or the end



of the desk. **Educators Furniture and Supply Co., Inc., 5912 "R" St., Sacramento 17, Calif.**

For more details circle #503 on mailing card.

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"LAYTITE" maple birch oak FLOORING

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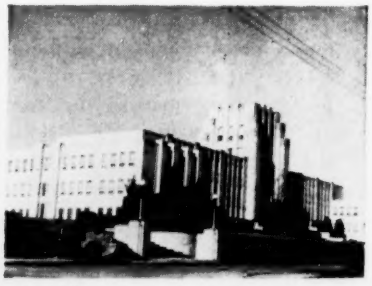
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CONNOR LUMBER & LAND CO.

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. . . before it's too late!

LET WESTERN WATERPROOFING COMPANY RENEW YOUR SCHOOL THIS YEAR

A *"stitch in time"* will save money . . . so restore your school to its original strength and beauty during 1954.

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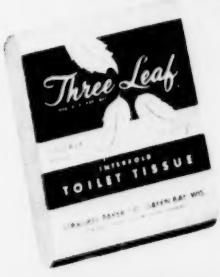
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Help classroom efficiency...
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With Straubel tissues, school authorities are assured of providing the *best* in sanitation facilities — the *best* in student health protection. Extra long paper fibres provide added strength — prevent easy break-through. Special processing treatments soften fibres, *without weakening*, making sheet soft and gentle with increased absorption qualities — a factor which reduces waste because fewer tissues are required. Full label banding protects from dust and dirt — assures *clean* tissues. Investigate these moderately priced *better* papers, today.

Improve—and save with Straubel Towels, too!



Sold thru merchants of paper products only — Write for name nearest you.

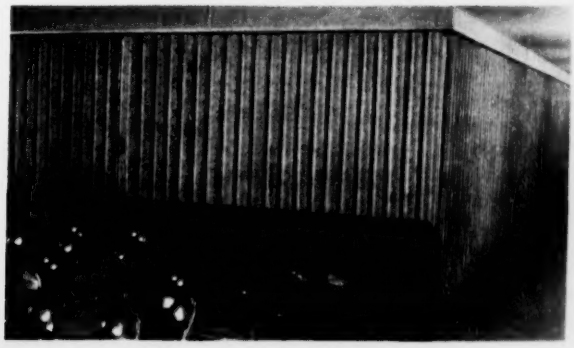
Make a comparative washroom test and learn why one Straubel Texturized towel does the job of two ordinary paper towels. Available in white sulphite and texturized bleached white or natural — singlefold or multifold.

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the problem: Tripled Attendance



the solution: MODERNFOLD

Christ the King School, of Columbus, Ohio, met the problem of tripled attendance with a basement recreation room—and Modernfold doors. Thanks to Modernfold, the basement now divides into several classrooms—yet becomes a single meeting and recreation area again by folding back the Modernfold walls.

Your Modernfold distributor can help you with the solution to your space problem, too. He's listed under "doors" in many classified directories. Contact him today —or mail coupon for full information.

Be Sure It's Modernfold

The first and best folding door. Vinyl covering over steel. Sizes for any opening. Cleans easily. No cornice above, no track below to catch dust and dirt. Lasts a lifetime.

NEW CASTLE PRODUCTS, INC.
New Castle, Indiana; Montreal 6, Canada



the doors that fold like an accordion
modernfold DOORS
by NEW CASTLE

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New Castle, Indiana
Please send full details on Modernfold doors.
Name.....
Address.....
City.....
County..... State.....

What's New . . .

Low Four Drawer File Features Increased Space

A new file, called the Super-Filer Lo-4, has recently been announced. It is a four drawer file which is built lower than traditional files, yet has almost the capacity of a conventional five drawer file. Top and bottom drawers are easily reached without too much stooping or stretching.

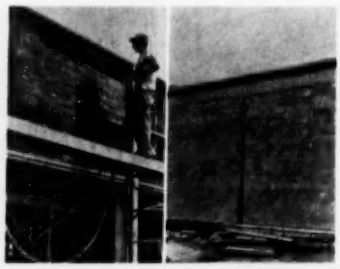
The cabinet features the advantages of the regular line of GF Super-Filers with the swing front giving increased capacity. By simple conversion the new file can be adapted for filing cards and checks as well as correspondence. **General Fireproofing Co., Youngstown 1, Ohio.**

For more details circle #504 on mailing card.

Concrete Spray Waterproofs and Strengthens

A new method of applying concrete for waterproofing as well as for wall construction is offered in Spraycrete. The specially designed Spraycrete equipment pre-mixes sand, water, cement and admixtures at high pressures, resulting in a mix that is easily applied by gun. The patented pre-mixing technic makes a product that gives complete waterproofing protection. Walls of any thickness can also be built of Spraycrete, or it can be applied over brick or tile construction to provide a smooth, waterproof surface, as shown in the illustrations.

Spraycrete high pressure pre-mixing eliminates shrinkage, achieves a perfect



bond, and is achieved by the use of patented, heavy-duty, mixing equipment. **Western Waterproofing Co., of Michigan, 9960 Freeland, Detroit 27, Mich.**

For more details circle #505 on mailing card.

Twin-Brush Floor Machine Handles General Maintenance

The Model A Twin-Brush Regina Floor Machine is a compact, streamlined unit designed for polishing, scrubbing and general maintenance. It operates efficiently on all kinds of surfaces including wood, linoleum, rubber, asphalt, plastic, cement, marble, terrazzo and travertine. The twin brushes are driven in opposite directions to eliminate torque thrust. The machine is always under complete control, is safe and easy to use, even by an inexperienced operator, and polishes into corners and up to walls and baseboards.

The convenient grip handle provides safe and easy transportation. Quiet and equalized operation is assured by the precision balance. Standard equipment includes combination brushes for scrubbing, waxing and polishing, reversible felt buffing pads and reversible steel wood pads. **The Regina Corporation, Rahway, N. J.**

For more details circle #506 on mailing card.

File Vault for Records and Letters

The Cole File Vault No. 992 is a sturdy safe cabinet providing space for valuable records, correspondence and supplies. It has two letter size ball-bearing file drawers, two double drawers for 3 by 5 or 4 by 6 inch cards, or for contracts or cancelled checks. A locked section is provided for valuables and there are three adjustable compartments and one shelf for books and supplies. Outer doors close with lock and key. A similar unit with legal size file drawers is available as No. 1092. **Cole Steel Equipment Co., Inc., 285 Madison Ave., New York 17.**

For more details circle #507 on mailing card.

(Continued on page 168)

"Safe-Lock" PROJECT-O-STAND! is "TOPS" from ANY ANGLE!



Used world wide by Schools, Churches, Businesses, Governments.

TOP AREA 19" x 12"

Height range 24" to 44"

- ADJUSTABLE LEGS for sloping floors and quick aiming
- RAISES or LOWERS to clear heads of audience
- STRADDLES SEATS where there is no center aisle
- PORTABLE folds compactly, weighs only 12 lbs.

"PROFESSIONAL" Model 203

An Amazing Value at only $33.75 price list



OTHER IMPORTANT FEATURES ARE: —

1. Permanent-Mold Hi-Test Aluminum Casting.
2. Legs have SOLID STEEL TIPS — 100% rigid.
3. Large Leg Lock Knobs — Foolproof.
4. Top table and legs have TAN WRINKLE ENAMEL FINISH to suit any decor.
5. Large 1⅛" diameter high-tensile aluminum legs. Inner legs tarnish-proof anodized.

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24-inch diameter

WORLD GLOBE

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Available in various mountings at prices you can afford to pay.

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DENOYER-GEPPERT CO.

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5235 Ravenswood Ave. Chicago 40, Ill.

Folding Tables by HOWE

Howe folding tables are especially designed for comfortable seating and rugged wear. They're light, strong—and practically indestructible. They fold smoothly and compactly—take up minimum space when not in use.



HOWE
Square Leg Table

All steel chassis. A brace at each leg for extra strength and a leg at each corner for engineering balance. Riveted and welded throughout. Choice of several different tops and sizes.



New **HOWE**
Pedestal Leg Table

All steel chassis with retreating leg fold. Strong, fool-proof lock with self-tightening principle. Two separate braces for each pair of legs. Braces are riveted to chassis. Choice of several different tops and sizes.



New **HOWE** *Bench and Table Combination*

This revolutionary folding bench and table unit is a wonderful convenience for cafeteria, classroom and many other uses. Converts quickly into a bench with back rest, or a two tier "bleacher." Folds automatically and can be moved with ease. No more lifting or lugging. It literally "floats" along.

Dimensions: Table—30" x 72" x 27" high. Benches—9½" x 72" x 16" high. Folded position—17½" x 72" x 38½" high.

IF IT FOLDS— ASK **HOWE**

HOWE FOLDING FURNITURE, INC.
ONE PARK AVENUE • NEW YORK 16, N. Y.

indispensable for MODERN SCHOOL ADMINISTRATION



MODEL S124

Rauland LOW-COST Intercommunication System

2-Way Communication and Program Facilities

- For up to 48 classrooms
- Emergency "All-Call" feature
- Volume level indicator
- Remote microphone operation
- Facilities for external radio and/or phonograph

This compact system is designed for use where ideal low-cost two-way communication facilities are desired for the supervision of all school activities. Has facilities for up to 24 classrooms (with optional "add-on" base for a total of 48 rooms). Includes valuable "All-Call" feature. Announcements, speeches and other voice transmission can be made by microphone to any or all room speakers, as desired. Speech origination from any room to the central cabinet is also possible.

For added usefulness, the S124 System has provision for connecting external radio and/or phonograph, permitting the distribution of radio or recorded programs to room speakers, as desired. Completely housed in compact, attractive all-steel blue-gray cabinet suitable for table or desk installation. Write for complete description covering this sensibly-priced, quality-designed-and-built School System.

RAULAND-BORG CORPORATION

Rauland-Borg Corporation
3515-N West Addison St., Chicago 18, Ill.

Send full details on RAULAND School Sound Systems.
We have _____ classrooms.

Name_____ Title_____

School_____

Address_____

City_____ Zone_____ State_____

What's New . . .

Maintenance Costs Cut With Wall Machine



A redesigned and improved model of the Wall Deterger has been announced. The machine, designed to wash walls speedily, is constructed of stainless steel and other non-corrosive metals and weighs only 42 pounds. It is highly mobile. A special low-cost attachment permits two men to operate from one machine, further speeding wall washing operations.

With the new detergent supplied with the machine only washing and buffing are required to clean the wall. The detergent is designed to clean effectively without streaks, with no harm to paint, and without odor. Use of the machine and detergent leaves walls in good condition for repainting. The Deterger operates by pressure which is built up in the pressure tank by an easy-to-operate hand pump. The liquid is controlled by a finger trigger on the glides. **Von Schrader Manufacturing Co., 16th St. & Junction Ave., Racine, Wis.**

For more details circle #508 on mailing card.

Stria Acoustical Tile Is Non-Combustible

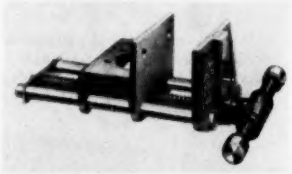
Many distinctive decorative possibilities in ceiling design can be achieved with the new non-combustible Stria Acoustical Tile. The new tile, while low in cost, has exceptionally high acoustical values and presents multiple striations or grooves. The tile surface has a pleasing appearance which blends with modern or traditional interiors. It reflects more than 75 per cent of light striking it.

Stria Acoustical Tile is a Fiberglas sound control product which is dimensionally stable, fire safe, will not rot, absorb or give off odors, and offers no sustenance to bacteria, termites or vermin. It does not warp, buckle, expand or contract under varying conditions and is easily cleaned with fresh wall paper cleaner or by the vacuum method. It is available in 12 by 12 and 12 by 24 inch sizes and may be spray painted with non-bridging water-base paint without affecting its noise reduction efficiency. **Owens-Corning Fiberglas Corp., Toledo 1, Ohio.**

For more details circle #509 on mailing card.

Woodworking Vises Have Steel Handle

A heavy tubular steel handle is now replacing wood in the majority of the woodworking vises in the Morgan line. The new steel handle is designed to last as long as the vise itself. The new improved handle will be furnished as a standard part of all Morgan Woodworking Vises, with the exception of Model 300A, at no additional cost. Wooden handles will still be available if specified. The new steel handle is



threaded at each end to take special end fittings and rubber washers. **The Morgan Vise Company, 108 N. Jefferson St., Chicago 6.**

For more details circle #510 on mailing card.

(Continued on page 170)



SUPERIOR SCHOOL FURNITURE

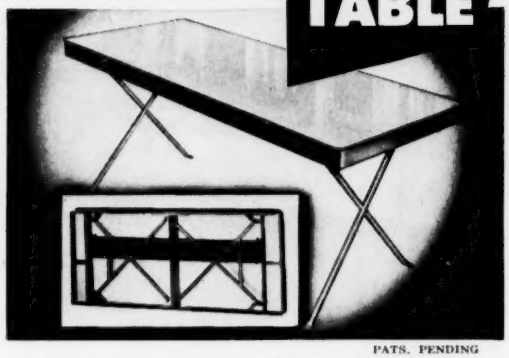
Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, and Tablet Arm Chairs.

Also available with plastic surface.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated
SILER CITY • NORTH CAROLINA

See the NEW **TRACY FOLDING TABLE**



PATS. PENDING

FIRST and ONLY folding table with ALL-STEEL unit-structure design!

Tracy's light-weight, welded steel frame combines the apron and edge in one unit. Unique Tracy design also features a lengthwise, hinged, brace-beam that supports the top and simultaneously locks both tubular steel pedestals. Single latch release permits easy one-man folding. Folds flush for compact storage.

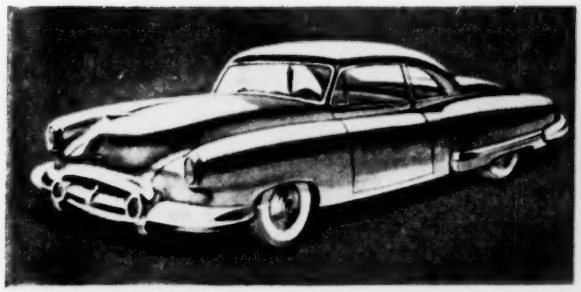
Choice of tops . . . brown tempered masonite Presdwood or beautiful Formica, stocked in three colors. (Other colors on special order) Choice of three decorator colors for frame and X-type pedestals.

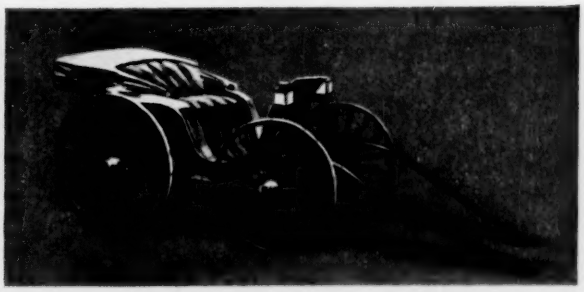
SPECIFICATIONS: 6 or 8 foot lengths; 30 inch width; 29 inch height for adults or 24 inch height for children.

Write TODAY for our illustrated brochure!

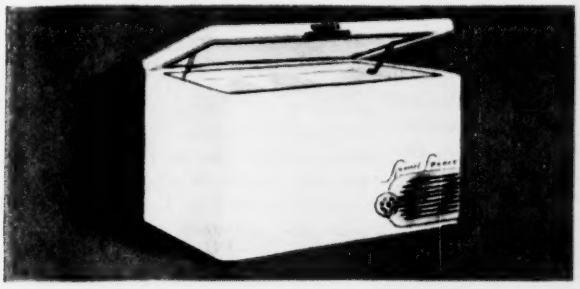
★ The TRACY Co.

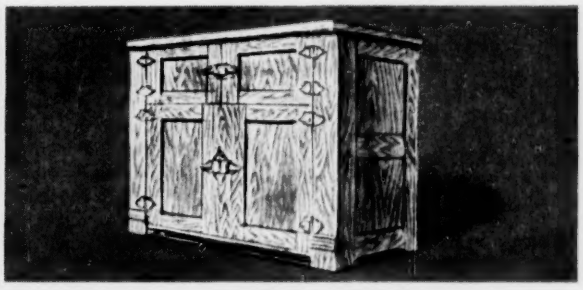
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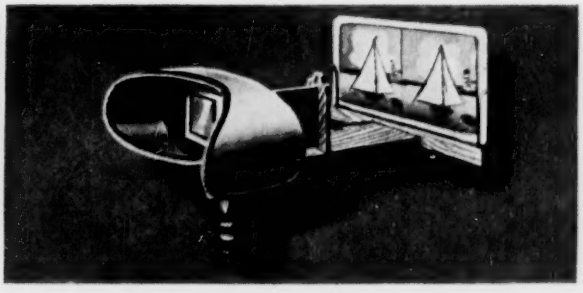
You have this . . . . . *Instead of this*





You have this . . . . . *Instead of this*





You have this . . . . . *Instead of this*

Advertising Benefits Everyone

The credit for the many wonderful products of our "American Way of Life" must be *divided.* The Inventor, the Investor, the Businessman, the Worker—all rightfully share that credit. **BUT** . . . it is *Advertising* that tells the story of the product; it is *Advertising* that whets public appetite for the product; and it is *Advertising* that helps sell the product. **AND** . . . the more product-demand that Advertising builds, the more products must be manufactured. That means Mass-Production which, in turn, means better products at lower prices. In short, a *still higher* American living standard. **SO** . . . *everyone* benefits. Industry, Business, Labor, Agriculture. But, most important of all, YOU the citizen.
And all with the help of Advertising!

ADVERTISING FEDERATION OF AMERICA *and* ADVERTISING ASSOCIATION OF THE WEST • *(Prepared by the Cleveland Advertising Club)*

What's New . . .

Three New Slide Projectors Give Clear, Brilliant Pictures

Viewlex has developed three new slide projectors featuring clear, brilliant, corner to corner projection. The Model V-5 is a 150 watt, convection cooled projector; the Model V-53 is a 300 watt motor fan cooled unit and Model V-55 is 500 watts, motor fan cooled. They are of solid and rugged construction, of die castings, finished in an attractive double baked hammertone gray, with all other parts plated and rustproofed throughout.

A new principle of cooling is offered in the motor fan cooled units featuring the Venturi-Airjector cooling system. Air is forced through a constricted tube to increase the speed of flow, thus removing hot air and keeping the units cool after hours of operation. A 2¼ by 2¼ carrier is furnished with the projectors and the 2 by 2 inch carrier may be had at additional cost. Projectors are available with either a 5 or a 6½ inch coated color corrected anastigmat professional lens. **Viewlex Inc., 35-01 Queens Blvd., Long Island City 1, N. Y.**

For more details circle #511 on mailing card.

Seating Space Increased With Half Round Table

A new folding table has been introduced in a half round shape. It was designed to provide increased seating capacity in minimum space and with comfort. The table has a ¾ inch hot



lacquered fir top, is 29½ inches high and has a diameter of 60 inches. The Du Honey 20 Lock automatically locks the legs into rigid position for strength and stability. **Midwest Folding Products, Roselle, Ill.**

For more details circle #512 on mailing card.

Floor Conditioner for Institutional Use

A new medium-sized floor conditioner has been introduced for use in smaller schools and institutions. Known as the FP-34, it is a twin brush model which quickly cleans expansive floor areas. The brushes are eight inches in diameter and cover a 16 inch path with each pass of the machine. The twin brushes rotate in opposite directions and make the machine easy to operate by eliminating any tendency to veer in one direction.

The FP-34 is equipped with combination brushes for scrubbing, waxing and polishing, one pair of self-buffing pads and one pair of reversible steel wool pads. A sanding kit is available for use with this machine. **Red Devil Tools, Irvington, N.J.**

For more details circle #513 on mailing card.

Generator Series Powered by Chrysler Engines

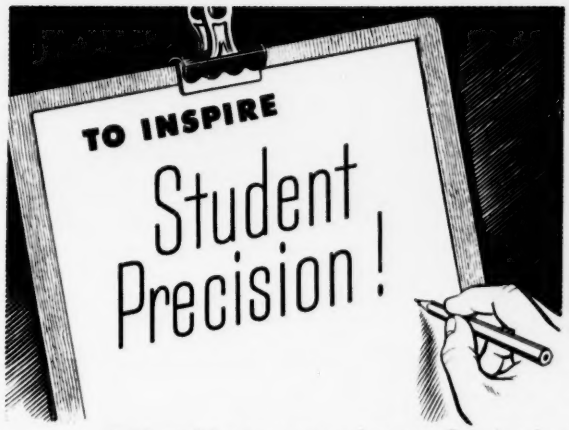
A new series of complete, packaged electric power generating plants has been developed, with power supplied by Chrysler industrial engines. Designed to deliver full rated power with maximum efficiency and economy, the new Ready-Power generator series includes 50, 30 and 20 KW ratings. They are designed for either standby or continuous service and can be equipped for fully automatic emergency standby service in schools and colleges. The units are economical in fuel consumption and smooth and quiet in operation. The heavy welded structural steel base assures easy installation and permanent alignment without a special foundation. Controls for both engine and generator are located in a single, simplified control cabinet. **Ready-Power Company, 11231 Freud Ave., Detroit 14, Mich.**

For more details circle #514 on mailing card.

(Continued on page 172)



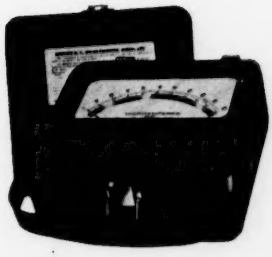




Preferred by instructors because they inspire students to new achievements . . . WESTON instruments also are the choice of practical administrators because their ruggedness and year after year dependability make their cost remarkably low! Ask for bulletin listing all instruments.

WESTON Electrical Instrument Corporation,
614 Frelinghuysen Avenue, Newark

For Advanced Requirements MODEL 622



Ultra sensitive instruments of the double pivoted type requiring no leveling when used in horizontal position. Combine high accuracy and a 6.1 inch scale . . . ideal for precise measurements of potential and current at very low energy levels. Available as d-c voltmeters, millivoltmeters, milliammeters and microammeters; electrolysis volt-millivoltmeters and high resistance voltmeters—also as a-c rectifier type instruments and as thermocouple ammeters, milliammeters and voltmeters.

For Electrical Machinery Labs MODEL 633

A clamp-on volt-ammeter built to Weston standards of safety, accuracy and dependability. Five full scale a-c current ranges of 1000/250/100/25/10 amperes with range overlap. Three self-contained a-c voltage ranges of 700/350/175 volts—insulated for 750 volts. Has convenient 6 position switch easily operated by thumb—adjustable pointer stop facilitates measuring starting current of motors.



WESTON

WESTON *Instruments*



One complete locking system for **All** your school lockers

Purchase **NATIONAL LOCK shackle locks**
Specify **NATIONAL LOCK built-in locks**

When your locking requirements call for shackle locks and built-in locks, there's only one name to remember . . . NATIONAL LOCK. Soundly engineered National Lock combination locks bring positive security and trouble-free performance to *all* your school lockers. Locks are available with or without masterkey feature . . . are self-locking . . . have black enamel dial and three-number dialing. FREE lock-record charts and binder assure simplified "1-system" locker control. Purchase National Lock Shackle Locks for vocational and laboratory lockers. Specify National Lock Built-in Locks on the lockers you buy.

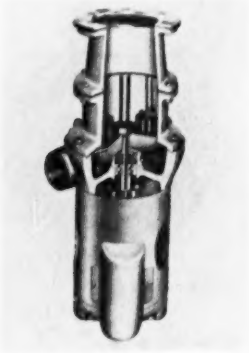
Write today on your school letterhead for a free sample shackle lock.

NATIONAL LOCK COMPANY
Rockford, Illinois • Lock Division

What's New . . .

Food Waste Disposer Efficiently Handles Continuous Loads

Large, continuous loads of all types of food waste can be handled with the new



Kitchen Pig Food Waste Disposer. The efficient unit quietly liquefies bones, fibrous vegetables, leafy greens, fruit pits and even corn cobs and husks. It is a heavy duty institutional disposer which washes away waste without fuss or bother.

The Kitchen Pig features three-way cutting action. As food waste enters the hopper, high speed choppers instantly chop it into large pieces, preventing fruit and vegetables from bouncing around. The manufacturer states that the teeth of the case-hardened grinders that further reduce the food waste into soft pulp never need resharpening. The final sizing in the spiral grooves pulverizes the pulp, forcing it through hardened-steel cutting edges. The powerful motor is totally enclosed for years of trouble-free operation. **Kitchen Engineering, Inc., 9330 Santa Monica Blvd., Beverly Hills, Calif.**

For more details circle #515 on mailing card.

Modern Appliances for Home Economics

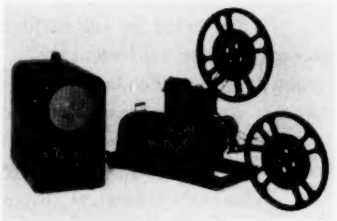
Home Economics departments in schools and colleges can now be equipped with the most modern home appliances for teaching. A new low cost school plan has recently been put into effect whereby schools may purchase Norge appliances at a special school discount rate and replace them at no extra cost with comparable newer models as they are released.

The plan permits equipping home economics laboratories with the latest appliances at a low cost, and keeping equipment up to date for teaching. Appliances available under the plan include refrigerator-freezer combinations, automatic washers and dryers, gas and electric ranges, upright and vertical freezers, wringer washers and water heaters. **Norge, Merchandise Mart, Chicago 54.**

For more details circle #516 on mailing card.

Transistor Projector in Single Case

Primarily designed to play back film with magnetic sound tracks recorded by the film user, the 477-R Projector has a built-in transistor, making possible a single-case unit. The transistor gives full sound-range amplification and is a shockproof, heatless semi-conductor. Use of the transistor makes possible the development of the new optical-magnetic playback projector in an easily-handled, single-piece design. The recording equipment of the magnetic projector has been eliminated for the playback unit, making possible wider use, at lower cost, of magnetic film recording.



Other features of the 477-R include a still picture button to permit stopping picture action for analysis or discussion, and a film reversing switch to back up film movement without stopping the projector. **Ampro Corporation, 2835 N. Western Ave., Chicago 18.**

For more details circle #517 on mailing card.

(Continued on page 174)

Order new

DUDLEY LOCKS *now*

for early delivery



You won't wait for delivery if you order the Dudley Locks you'll need next Fall now. You'll also help those who cannot anticipate their lock requirements in advance. We can supply everyone, *on time*, as long as we're not swamped in September with last minute orders that could have been placed now.

The RD-2 with *solid stainless steel* case, and the RP-5 are two of the most rugged and dependable combination padlocks ever built. Master-keyed P-570 and S-540 locks (below) feature the unique Dudley Master Key that commercial locksmiths find hard to duplicate.

You'll find it easy to order from the illustrated Dudley catalog. We'll send it *free*, together with details of the Dudley Self-Financing Plan.



P-570 Master-keyed combination with the **SAFE** Dudley key



S-540 Master-keyed locker lock with speedy reset key for changing combinations in a few seconds

DUDLEY LOCK Corporation

Dept. 610, CRYSTAL LAKE, ILLINOIS

on

American Desk

MANUFACTURING COMPANY

ONE-12



of course it's **FIBERESIN**

Leading MANUFACTURERS CHOOSE the BEST because they KNOW the BEST . . . **FIBERESIN** Desk Tops.

Send for details.

FIBERESIN

PLASTICS COMPANY

OCONOMOWOC, WIS.



Gymnasium of Holy Cross School, Omaha, Nebraska. Size is 71x94 ft., with arches spaced at 15 feet and purlins spaced at 7 feet. Glulam rafter beams are framed into concrete proscenium beam. Architect: John E. Loftus, A.I.A., Omaha; general contractor is Rorick Construction Company of Omaha.

Save Money on Your Gymnasium with double duty glulam arches

This gymnasium is typical of thousands built throughout the country using strong, attractive, fire-safe glulam arches of Timber Structures, Inc. Arches support the roof load, and curtain sidewalls are relatively light and inexpensive. Beautiful as only natural woodwork can be, these arches are left exposed for their fine architectural effects.

The color booklet, "Modern Functional Schools", shows several arch arrangements that provide economical gymnasiums. Get your copy from your nearest Timber Structures office, or write us direct.

TIMBER STRUCTURES, INC.
P. O. BOX 3782-H, PORTLAND 8, OREGON
Offices in Ramsey, N. J.; Chicago; Detroit; Lenexa, Kansas; St. Louis; Minneapolis; Columbus; Omaha; Dallas; New Orleans; Birmingham; Charlotte; Memphis; West Hartford; Seattle; Spokane; Eugene; Richmond, California.

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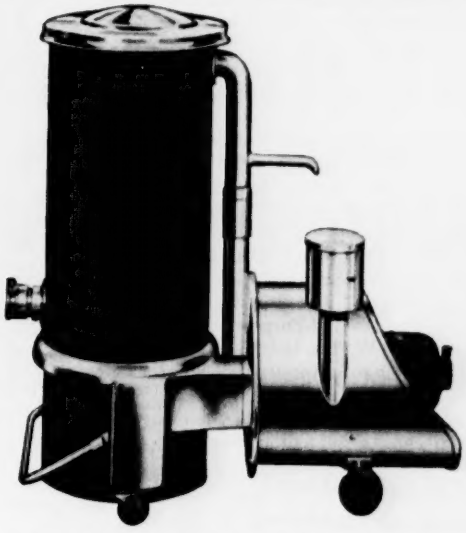
What will your school system do this summer to get ready for the maximum use of audio-visual resources next fall?

Four audio-visual directors of school systems in New York, California, Virginia and Iowa—will answer this question in the next issue of the NATION'S SCHOOLS.

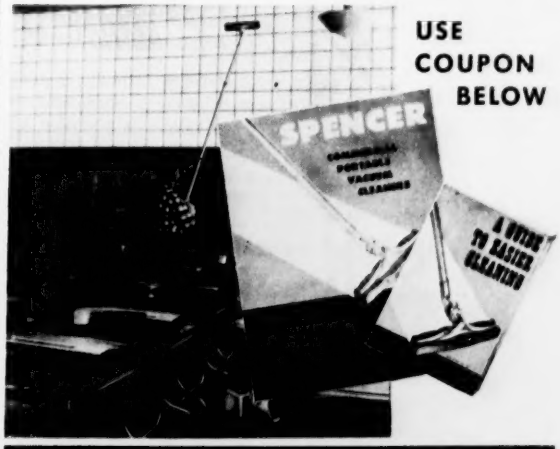
Don't miss this! It will help you get your audio-visual department underway at top speed next fall.

The NATION'S SCHOOLS
919 N. MICHIGAN AVENUE
CHICAGO 11, ILLINOIS

SPENCERS'
GREATER VACUUM POWER MEANS CLEANER SCHOOLS



Where the health and well-being of children are at stake, choose Spencers with that **extra vacuum power.** Get all the dirt — all the time — and with less effort for the operator. When you select a Spencer, you have the finest portable vacuum cleaning equipment available to schools. Detailed literature on request.



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SPENCER HARTFORD

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Please send my copy of A GUIDE TO EASIER CLEANING

Name .....
Street & No. .....
City & State .....

45P84

What's New . . .

Product Literature

• A basic new room-planning technic for science teaching has been developed by E. H. Sheldon Company, Muskegon, Mich., to provide economically the flexibility needed in these departments. The story of the new service is told in a brochure entitled **"Sheldon and the New Direction in Science Education."** It describes the Sheldon Total-Experience Science Laboratory designed to permit the teacher freedom to guide class and individual student progress to the greatest individual advantage. The brochure offers floor plans for flexibility and efficiency in science teaching, gives a schedule of equipment for such a laboratory, discusses the problems and their suggested solutions and describes the newly developed Sheldon All-Purpose Science Table No. J-105-W. The brochure should prove invaluable to administrators, architects and teachers in planning new developments and modernization to increase the effectiveness of present facilities.

For more details circle #518 on mailing card.

• A series of drawings and specifications showing the **architectural use of aluminum as an exterior wall facing material** is being made available by the Aluminum Company of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. The drawings illustrate recent construction with aluminum and the shop or erection drawings show how the various types of aluminum panels are installed. Included in the series are school and hospital buildings. Specifications can be adapted for any institution or commercial building. The drawings and specifications were obtained directly from the originating architects and sub-contractors who fabricated the metal sections.

For more details circle #519 on mailing card.

• **Mills Movable Walls Catalog** is a 68 page book of detailed information on flexible interiors which provide "space control" by keeping space efficiently used and adaptable to changing requirements. It is a practical workbook issued by The Mills Co., 967 Wayside Rd., Cleveland 10, Ohio, containing descriptive information, photographs, detail drawings and construction details.

For more details circle #520 on mailing card.

• A revised edition of **"Better Laboratory Planning,"** has been issued by the Scientific Apparatus Makers Association, 20 N. Wacker Drive, Chicago 6. A comprehensive approach to the better planning of laboratories is presented in the revised edition, based upon helpful comments from users of the original publication. New and attractive pictures of laboratories in colleges, hospitals, secondary schools and other institutions are presented and there is a helpful section on bidding.

For more details circle #521 on mailing card.

(Continued on page 176)

• **Catalog No. 254** on the **Flex-Master Lifetime Steel Drawing Tables for Schools** is now offered by Stacor Equipment Co., 768 East New York Ave., Brooklyn 3, N.Y. The illustrated booklet gives detailed information on all models of drawing tables, student board storage cabinet and tool cabinet, student drawing tables and student drawing table assemblies.

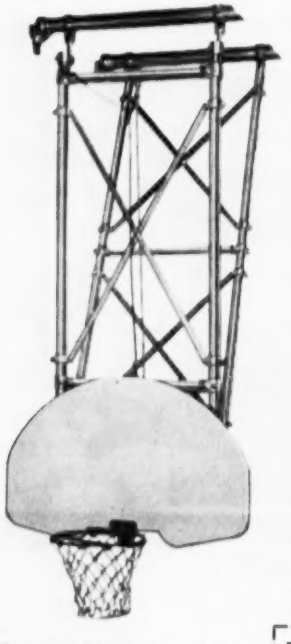
For more details circle #522 on mailing card.

• The new line of auxiliary emergency lighting equipment recently announced by The Electric Storage Battery Co., Box 8109, Philadelphia 1, Pa., is described in a four page pamphlet known as **Form 4808.** The information is presented to assist architects, administrators, engineers, purchasing agents and others in the selection of emergency lighting equipment. Typical emergency lighting installations are illustrated and described with suggested specifications conforming to the recently revised National Electrical Code.

For more details circle #523 on mailing card.

• The story of the use of motion pictures for training is told in a booklet on **"Repetitive Impact"** issued by Seminar Films, Inc., 347 Madison Ave., New York 17. Described is the system of lesson-length loop-films which repeat a lesson continuously until learned. The system has been developed for use on any 16 mm. motion picture projector.

For more details circle #524 on mailing card.



For the BEST in Basketball Equipment

THE RECREATION LINE

Depend upon Recreation to equip basketball courts with the latest improved backboards. Illustrated, our newest design Swing-Up type, fully automatic, operated by enclosed safety worm gear winch. Choice of fan-shaped metal, plywood or glass bank, or rectangular bank in plywood or glass. Line also includes wall-braced, suspended braced, wall-type swing-up, and portable frames and backboards. Standard on all is 6" extension of bank from supporting pipes, making action of ball clearly visible. Pipes are hot galvanized steel with malleable iron or brass fittings. Our engineering department is at your service to provide installations conforming to your specifications.

For over 20 years we have supplied the finest in equipment for the nation's playing courts, swimming pools parks and playgrounds.

RECREATION EQUIPMENT CORP.
Dept. NS6, 724 West 8th Street
Anderson, Indiana
Please send me your FREE CATALOG
☐ Basketball
☐ Playground and Swimming Pool

Name .....
Address .....
City ..... State .....

LIFTS DIRT . . .
HOLDS IT OFF . . .

CINDET

100% ACTIVE 100% SAFE!

NEW LIQUID SYNTHETIC DETERGENT

CINDET can be used *in hard or soft water* for the hundreds of cleaning needs throughout your school or college buildings. It LOOSENS dirt quickly, LIFTING IT AWAY AND HOLDING IT IN SUSPENSION in a mass of creamy suds. Removes stubborn stains, rubber marks.

CINDET works fast, dries quickly, can be used safely on *anything water itself won't harm* — including the user's skin. Use CINDET to strip old water emulsion waxes from floors quickly and surely, AND FOR ALL GENERAL CLEANING PURPOSES.

CINDET is approved by the Rubber Manufacturers' Division of the Rubber Manufacturers' Association.

Write for Dolge literature on CINDET, and have your DOLGE SERVICE MAN demonstrate its easy, economical use.



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BE SURE

with

The Finest

LOW COST

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ATTRACTIVE

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DURABLE



No. 60 BAKELITE BOSTON INKWELL

SQUIRES INKWELL CO.

Pittsburgh 15, Penna.



The HEART of

LOXIT FLOOR-LAYING SYSTEM

Simple—Practical—Economical. Controls expansion. Compensates for contraction. No special tools required. A "must" for wood floors laid on concrete in large areas—gymnasiums, field houses, auditoriums, ballrooms, shops, etc. Lays strip wood flooring mechanically. Only three parts; the Loxit channel, the Loxit anchor and the Loxit clip. Write for details and samples.

LOXIT SYSTEMS, INC.

1217 W. Washington Blvd., Dept. PA 5, Chicago 7, Illinois

New Lower Prices!

AMERICAN SEATING FOLDING CHAIRS OUTLAST ALL OTHERS!

UNEQUALED FOR STRENGTH

Engineered like a bridge of triangular-steel tubing! The four reinforcing cross-braces are rugged steel bars, shouldered against the inside of the tube and securely riveted outside.

UNEQUALED FOR COMFORT

Even portly people relax and say "Ah-h-h!" as they sit back in the extra-wide, extra-deep seats of special body-fitting design, their shoulders welcomed by deep-drawn back panels.

UNEQUALED FOR SAFETY

There are no snagging, pinching, or soiling hazards, no sliding or binding parts to pinch fingers. 5-ply birch plywood seats are hot-press bonded; edges rounded, won't chip or feather in long use. Chair can't tip forward in use.

UNEQUALED FOR CONVENIENCE

These chairs fold quickly, quietly, compactly, and are silent in use as well. Long-life tread-rubber shoes won't come off in use, cannot injure finest floors; can't slip, slide or rattle.



LOWEST PER-YEAR COST!

OVER 10 MILLION IN USE!

OUTNUMBER ALL OTHERS IN SCHOOL USE

3 POPULAR SEAT STYLES

No. 54—*5-ply formed Birch Plywood*, hot-press bonded to permanent body-fitting comfort-shape. **No. 53**—*Shaped Steel* for rugged outdoor or indoor use. **No. 56**—*Imitation-leather Upholstered*, highest quality material over cotton padding on plywood base.

ALL METAL PARTS corrosion-resistant Bonderized, followed by two coats of enamel—one coat dipped to insure internal coverage of tubes, eliminating rust and noise—an effect similar to automobile undercoater.

MAIL COUPON TODAY!

American Seating Company

DEPT. 5, GRAND RAPIDS 2, MICHIGAN

☐ Please send your latest brochure on AMERICAN SEATING FOLDING CHAIRS.

☐ I am interested in_____(quantity)

☐ Birch seats. ☐ Steel seats. ☐ Upholstered seats.

*Name or School*_____

*Street*_____

*City and Zone*_____ *State*_____

*Individual and title*_____



HANDY STORAGE TRUCKS

Four styles, for general or under-stage use. Permit easy, fast, convenient storage. Swivel casters, removable handles, ample capacity.

Clamps for Sectional Grouping. Permit fastening chairs in sections of two, three, or four, one inch apart.

Steel Threshold. Available to lock chairs into position at ends of rows, 30" back to back, for three or more rows.

What's New . . .

• A series of pamphlets has been developed to assist administrators, department heads and teachers in the selection of equipment and apparatus for various teaching laboratories. Published by Central Scientific Company, 1700 Irving Park Rd., Chicago 13, the pamphlets have been carefully planned to save time and effort on the part of school officials, and to ensure all needed equipment and supplies in the departments. Additional suggested material is included to meet specific local requirements and experiments. There are four separate pamphlets, any or all of which will be supplied to school administrators in any quantity desired for the use of department heads and teachers. The pamphlets cover the following: **Laboratory and Demonstration Equipment for Secondary School Chemistry, Laboratory and Demonstration Equipment for Secondary School Biology, Laboratory and Demonstration Equipment for Junior and Senior High School General Science** and **A Suggested List of Materials and Apparatus for the Teaching of Elementary Science.**

For more details circle #525 on mailing card.

• **The Kewanee-Petro Boiler-Burner Catalog 502** tells the story of a unit which has been produced for either gas, oil, or oil and gas firing, for high or low pressure operation. Descriptive information on the boiler, which with supplemental equipment is all mounted on skids and assembled for the attachment of the firing equipment, is given in the catalog which also carries detailed information on the firing equipment and its assembling. Cut-away color photographs, charts and regular product photographs illustrate the descriptive text.

For more details circle #526 on mailing card.

• **The 1954 Catalog of Voit Rubber and Rubber-Covered Athletic Equipment** is now available from W. J. Voit Rubber Corp., 1600 E. 25th St., Los Angeles 11, Calif. The booklet illustrates and describes approximately 100 items. Included are new additions to the line such as the super-soft softball with a sponge rubber center, and a baseball base built on a new principle. Featured items are Voit's improved top-grade inflated athletic balls and a completely new mold design for long wear with official performance.

For more details circle #527 on mailing card.

• How to select the right product for each cleaning purpose is discussed in the new **"Soap and Synthetic Detergent Buying Guide"** issued by Colgate-Palmolive Company, 105 Hudson St., Jersey City 2, N.J. Economies in time, effort and money can be effected through a study of the material which covers the complete line of cleaning products in a compact, pocket sized booklet.

For more details circle #528 on mailing card.

• Architectural data on **Electric Clock and Program Systems and Fire Alarm Systems for Schools** is given in a new **Bulletin No. 210** recently released by The Standard Electric Time Co., 89 Logan St., Springfield 2, Mass. The bulletin gives complete details on the systems, discussing the installations, specifications, and operation of each.

For more details circle #529 on mailing card.

• **Stock Metal Building Products** available from Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11, Mich., are pictured and described in a new catalog recently issued. The material covers Fenestra Windows, installation accessories for windows, outside-inside metal trimmed units, steel window wall units, sliding closet doors, hollow metal doors and other products.

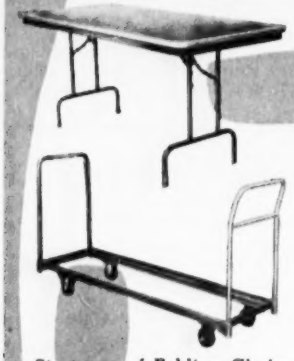
For more details circle #530 on mailing card.

• A new cardboad device called the **Florule** has just been brought out by Multi-Clean Products, Inc. 2277 Ford Pkwy., St. Paul 1, Minn. Described as **"a guide to better floor finishing,"** the Florule gives information on how to treat various types of floors. The 4 by 6 inch card has a rotating dial which, when pointed to the name of a type of flooring, discloses the proper floor materials to use, coverage per gallon, drying time and method of application.

For more details circle #531 on mailing card.

(Continued on page 178)

Midwest
FOLDING TABLES
CADDIES
BUILT IN QUALITY . . . BUILT IN BEAUTY



Pedestal or straight leg tables . . . sturdy and well constructed for a lifetime of trouble-free use. Wide variety of sizes and top materials. Safe, positive "Du Honey 20" lock featured on all tables.



Six types of Folding Chair and Table Caddies, including understage models Durable all-steel construction.

Write for Catalog Today!

Distributors in all principal cities

MIDWEST FOLDING PRODUCTS
DEPT. S-3, ROSELLE, ILLINOIS

Far-Sighted Choice for Sound Planning



TUBULAR STEEL SCHOOL FURNITURE
In Carefully Graded Sizes
Write today for illustrated catalogue:
Heywood-Wakefield School Furniture Division
Menominee, Michigan.

"then the dragon came..."



Nobody tells a story like Daddy. The everyday world fades away as his words lead you into a new and shining land.

And what if the Dragon is a bit scary? You need only climb into Daddy's arms to be safe and secure again before it's time to sleep.

To make those we love safe and secure is the very core of homemaking. It is a privilege known only in a country such as ours, where men and women are free to work for it.

And taking care of our own is also the way we best take care of our country. For the strength of America is simply the strength of one secure home touching that of another.

Saving for security is easy! Read every word—now!

If you've tried to save and failed, chances are it was because you didn't have a *plan*. Well, here's a savings system that really works—the Payroll Savings Plan for investing in U.S. Savings Bonds. This is all you do. Go to your company's pay office, choose the amount you want to save—a couple of dollars a payday, or as much as you wish. That money will be set aside for you before you even draw your pay. And automatically invested in Series "E" U.S. Savings Bonds which are turned over to you.

If you can save only $3.75 a week on the Plan, in 9 years and 8 months you will have $2,137.30.

United States Series "E" Savings Bonds earn interest at an average of 3% per year, compounded semiannually, when held to maturity! And they can go on earning interest for as long as 19 years and 8 months if you wish, giving you a return of 80% on your original investment!

Eight million working men and women are building their security with the Payroll Savings Plan. For your sake, and your family's, too, how about signing up today? If you are self-employed, ask your banker about the Bond-A-Month Plan.

The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.

What's New . . .

• A photograph of a modern classroom, in full color, forms the cover of the new catalog of **Brunswick School Furniture** recently released by the Brunswick-Balke-Collender Company, 623 S. Wabash Ave., Chicago 5. Each article in the comprehensive, attractive line is illustrated in natural color in a full page. Opposite the picture are sketches showing combinations of furniture, uses of the piece of equipment pictured, and descriptive text giving construction data, uses and function. An introductory page gives the philosophy back of this modern line of furniture designed for comfort, flexibility and attractive appearance. In addition to chairs, tables and desks of varying sizes and styles, the line includes folding gym seats, partitions, stages and classroom wardrobes. A section of the 44 page catalog is devoted to sketches and descriptive text on every detail of engineering and construction of the line.

For more details circle #532 on mailing card.

• A new application for the Spencer Stationary Vacuum Cleaning System is discussed in **Descriptive Bulletin No. 153** issued by The Spencer Turbine Company, Hartford 6, Conn. The bulletin covers the problem of handling the dust collected in dust mops without shaking it out where it wil again be circulated. The Vacuslot System for cleaning this equipment through a metal plate located on the floor and having a large vacuum slot is described. The system can also be used for cleaning dust rags, erasers and other dust collecting cleaning equipment.

For more details circle #533 on mailing card.

• **L-69 Floodlights for Sports Lighting** is the title of the new seven-page bulletin on sports lighting applications put out by General Electric, 1 River Rd., Schenectady 5, New York. The new bulletin pictures well-planned lighting in football, baseball, basketball and other sports with the numerous benefits of night sports outlined. The publication describes the construction of the G-E L-69 floodlight and offer a manual of complete floodlighting plans designed to assist in setting up sports lighting facilities.

For more details circle #534 on mailing card.

• **"Using the Freezer in the Classroom"** is the title of a 12 page booklet issued by Ben-Hur Mfg. Co., 634 E. Keefe Ave., Milwaukee 12, Wis. It is written to assist the home economics teacher in planning and conducting classes and each subject covered is illustrated with an attractive sketch.

For more details circle #535 on mailing card.

• A report of the Waxes and Floor Finishes Division, Chemical Specialties Manufacturers Association, Inc., on **"The Effect of the Use of Floor Wax on Vinyl Flooring"** has been published by the Association, 110 E. 42nd St., New York 17.

For more details circle #536 on mailing card.

• Condensed but complete information on **Smithcraft "Area Illumination"** is given in a new 8 page catalog recently released by Smithcraft Lighting Division, 233 Everett Ave., Chelsea 50, Mass. The catalog is profusely illustrated with photographs and drawings and presents a "cross-index" of fluorescent lighting.

For more details circle #537 on mailing card.

• **Catalog R-54** is a new 16 page booklet on Wayne Rolling Gymstands. Released by Wayne Iron Works, Wayne Pa., the catalog is illustrated with photographs and drawings and describes in detail economies in indoor seating, types and sizes available, factors in selecting and accessories available. Also included are planning aids, typical gymnasium floor plans and specifications.

For more details circle #538 on mailing card.

• A new **Sanymetal Suspended Ceiling Catalog SN-6** has been issued by Sanymetal Products Co., Inc., Suspended Ceilings Division, 2093 E. 19th St., Cleveland 15, Ohio. Advantages, engineering data and architectural specifications on two popular types of suspended ceiling systems, known as Nailock and Screwlock, are contained in the catalog. Both systems are designed for use with a wide variety of suspended ceiling and acoustical materials and provide a ready means of detachment of facing materials, with full salvage, when access is required for repair work or for remodeling.

For more details circle #539 on mailing card.

• The new Servisafe line of metal pole units designed to permit safe, efficient ground-level luminaire servicing is discussed in the new 32 page catalog, **"Thompson Servisafe Units for Pole and Wall Mounted Luminaires."** Released by Thompson Electric Company, 1128 Power Ave., Cleveland 14, Ohio, **Catalog No. PB-53** covers four Servisafe models and a variety of adapters and accessories available for use with them.

For more details circle #540 on mailing card.

• **How to install a rubber tile floor,** from the room diagram to the finished product, is covered in a new folder offered by the Rubber Flooring Division of The Rubber Manufacturers Association, 444 Madison Ave., New York 22. A chart on which to diagram the room and lay out the floor pattern is included with instructions on preparing the sub-floor, installing the rubber tile and maintaining the finished floor.

For more details circle #541 on mailing card.

• A new catalog on **Ellison Balanced Doors** has been released by Ellison Bronze Co., Inc., Jamestown, N.Y. Described as "the door that lets traffic through quickly," details of the new control mechanism used on the door are given in the catalog. The catalog carries specifications and illustrates operation and construction details by line drawings and diagrams.

For more details circle #542 on mailing card.

• **"How to Take 15 Years Off School Building Costs"** is the intriguing title of a four page folder released by Armco Drainage & Metal Products, Inc., Middletown, Ohio. How Armco steel school buildings "meet today's needs at yesterday's costs" is the subject of the discussion, which is illustrated by photographs of school buildings.

For more details circle #543 on mailing card.

Film Releases

"Poster Making; Printing by Silk Screen," color, 14 min. film. "El Pueblo Guatemalteco," a graded Spanish edition of "Natives of Guatemala," color or black and white, 10 min. film. **Bailey Films, Inc., 6509 De Longpre Ave., Hollywood 28, Calif.**

For more details circle #544 on mailing card.

"Adventures in Stamps," 35mm color filmstrips including: "Railroading in Stampdom," "Discovery and Exploration of the North Pole," "American History Viewed Through Stamps," "Radio Philatelia," "History of Aviation," and "Stamps Cause Wars and Revolution." **Cambridge Productions, 17 East 45th St., New York.**

For more details circle #545 on mailing card.

"King Richard II," two hour film of Maurice Evans' television production, 16mm sound, divided into three sections of forty min. each. **Institute of Visual Training, Inc., 40 East 49th St., New York 17.**

For more details circle #546 on mailing card.

"Simple Harmonic Motion," "Progressive Waves," "Stationary Transverse Waves," and "Stationary Longitudinal Waves," all part of the AAPT Physics Series. "U-238 Series" and "The Nuclear Reactor," both in elementary nuclear series. **McGraw-Hill Book Company, Text-Film Dept., 330 W. 42nd St., New York 36.**

For more details circle #547 on mailing card.

Suppliers' News

The Connor Lumber and Land Co., Wausau, Wis., manufacturer of hardwood flooring, plywood and veneers, announces removal of its flooring and lumber sales offices from **Marshfield, Wis.** to **231 Thomas St., Wausan, Wis.** The change has been made to consolidate the activities of the company, bringing the sales office into closer contact with the manufacturing facilities, in order to give more prompt and efficient service.

Griggs Equipment Company, Belton, Tex., manufacturer of school, auditorium and theater furniture, announces the purchase of the **Kroehler Original "Push-Back" Theater Chair** from the **Kroehler Manufacturing Co.** The Kroehler chair will be manufactured in future by Griggs, giving that company a complete line of auditorium seating. They will also service Kroehler chairs already installed.

PRODUCT INFORMATION

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The Wayne Works

476 Garfield Luminaire
Pittsburgh Reflector Company

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Spartan School Equipment Company

478 Self-Regulating Time System
International Business Machines Corp.

479 Two-Fol Table and Bench Set
Rol-Fol Table, Inc.

480 Super School Bus
Oneida Products Corporation

481 Miniature Instruments
Weston Electrical Instrument Corp.

482 Faucet Washer
J. A. Sexauer Mfg. Co.

483 Self-Closing Waste Receptacle
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484 Power Tool Benches
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485 N P Weed Killer
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486 Steel Chalkboards
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491 Steel Chalkboards
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The Regina Corp

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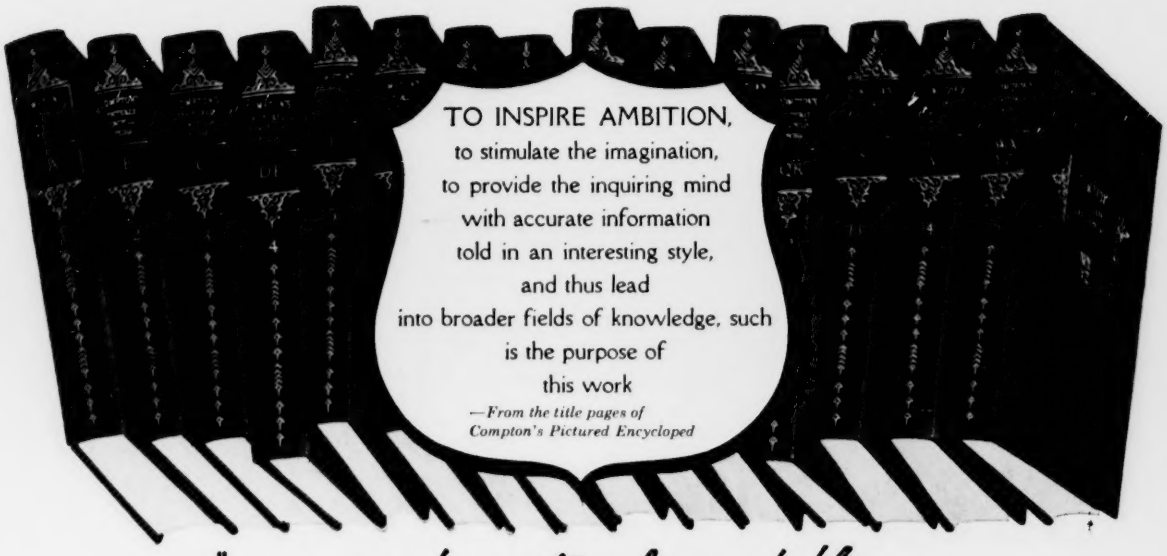


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